# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, July 27, 1911.

## CONTENTS.

CONSTRUCTION NEWS:
Railways .................... 37
Electric Railways .................... 37
Light and Power Plants .................... 37
Bridges .................... 38
Buildings .................... 38
Water Supply and Irrigation .................... 40
Sewerage .................... 41
Garbage Disposal .................... 42
Streets and Roads .................... 42
Manufacturing Plants .................... 43
Miscellaneous Contracts .................... 44
Contract Prices .................... 44
U. S. Possessions and Cuba .................... 46
Foreign Contracts .................... 46
Plans and Specifications on File .................... 45
List of Contracts Pending .................... 45
PROPOSALS .................... 46-47-48

## RAILWAYS.

(*Denotes that this work is advertised in Engineering News.)*

**New Hampshire.**—Boston & Maine R. R. (System), Mt. Washington Ry.—We are officially advised that surveys are being made to determine the feasibility of a road to the summit of Mt. Washington to take the place of the old cog wheel road, but at present no details are available.

**North Carolina.** — Virginia-Carolina Ry.—We are officially advised that the Virginia-Carolina Ry. Co. has no definite information yet regarding the construction of a line into North Carolina. It is stated, however, that several engineering corps are in the field locating lines from the mouth of Green Cove Creek in Washington County, Va., on the present line of the company, along that creek, crossing Palm Mountain, thence along Horse Creek and Helton to the north fork of the New River. From thence the line will run up the river to the mouth of the Buffalo, thence to the south fork of the New River. Wilton E. Mingea, Abingdon, Va., is Pres. and Gen. Mgr.

**South Carolina.**—A new railway from Anderson to Knoxville, Tenn., is contemplated by F. G. Mauldin.

**Georgia.**—Adel, Thomasville & Pavo R. R.—This company has recently been incorporated to build a road 45 miles long from Adel through Berrien, Colquitt, Brooks and Thomas counties to Thomasville. The incorporators are H. H. Tift, Tifton; R. C. Woodward, J. B. Kennon, P. E. Williams, A. W. Parrish and J. Z. Jackson, of Berrien, and C. E. Davis, of Colquitt.

✚Southern Ry.—The contract for double tracking between Oakwood and Buford, eleven miles, has been awarded to LANE BROS. CO., Altavista, Va.

**✚Missouri.**—Missouri, Arkansas & Gulf Ry.—Press advices state that a contract has been awarded by this recently incorporated company, to P. A. HERRINGTON, Houston, Mo., for grading between Rollo and Licking. Gilbert Lay, St. Clair, Mo., is Pres. Noted April 27.

**Arkansas.**—De Queen & Eastern R. R.—This company, operating a short line in the western part of the state, contemplates an extension from its eastern terminus, Dierks, to Hot Springs, about 75 miles. E. S. Buyington, De Queen, Ark., is Ch. Engr.

**Texas.**—Crystal City & Uvalde R. R. —This road is to be extended from Gardendale to Dulls, about 25 miles. E. Breaker, Crystal City, Tex., is Ch. Engr.

International & Great Northern R. R. —With the reorganization of this company a substantial sum will be spent on improvements. The entire 150 miles of line from San Antonio to Laredo will be relaid with 75-lb. rails. Much regrading is contemplated, and it is expected that $1,000,000 will be spent in the near future on improvements. O. H. Crittenden, Palestine, Tex., is Consult. Engr.

**Utah.**—Thompson & Ballard R. R. —This company, recently incorporated, proposes to build a road from the Denver & Rio Grande R. R., at Thompson, in Grand County, and at first will extend a little less than eight miles into the coal country. The officers are: B. F. Bauer, Pres.; William Darke, Secy.; and W. S. McCarthy, Treas.

**✚Nevada.**—Oregon Short Line R. R. —A contract, involving about $200,000 for the construction of a branch from Tulasco to the new town of Metropolis, has been awarded to the UTAH CONSTRUCTION CO., Ogden, Utah.

**Washington.**—Bellingham, Mt. Baker & Spokane, R.R. This company has recently been incorporated to build a line from Bellingham to Spokane by way of Deming, Glacier, to the headwaters of the North Fork of the Nooksack River, where a tunnel of about a mile long will be required, along the Skagit River; along Slate Creek to near Barron; from there down the Methew River and Valley to Twisp, to Silver, to Methew, to Pateros at the junction of the Methew and Columbia Rivers, and thence along the Columbia River into Spokane. The line will tap Whatcom, Stevens, Ferry, Okanogan, Lincoln and Douglas Counties, having a total length of 300 miles. The incorporators are Joseph Morrison, J. E. Morrison and Albert E. Mead, of Bellingham; W. L. Hart, of Blaine; F. Peace, of Vancouver, B. C.; M. P. Hurd, of Mt. Vernon; J. W. Welsh, of Vancouver, B. C.; A. C. McLean, of Seattle; Z. E. Hawkins, of Nome, Alaska, and C. T. Wingate, of Tilden, Wash.

**Alaska.**—Copper River & Northwestern Ry.—Surveys are being made into the White River Section from mile 191. This extension would include about 60 miles of line not taking into account a line twelve miles long that has been surveyed up McCarthy Creek. E. C. Hawkins, Seattle, Wash., is Gen. Mgr. and Ch. Engr.

**✚British Columbia.**—Great Northern Ry.—A contract for laying track and erecting six bridges along the Tulameen River, between Princeton and Coalmont, about twelve miles, has been awarded to GURTHIE & CO., St. Paul, Minn.

## ELECTRIC RAILWAYS.

(*✚Denotes a contract awarded.*)

**Birdville, Pa.**—Preliminary arrangements have been made for the construction of a line to be built by the Tarentum, Brackenridge & Butler Street Ry. Co., and in all probability the grading will start at once. The line will be built to Birdville this summer, and extended to Freeport some time next year. The line will ultimately be built to Butler.

**Irwin,. Pa.**—The Pittsburgh, McKeesport & Greensburg Ry. Co. has been granted a franchise to construct a line on Fourth St., from Main St. to the west boundary of Irwin. J. L. Fritsch, Connellsville, is Ch. Engr.

**✚Waynesburg,. Pa.**—The Waynesburg & Blacksville St. Ry. Co. has awarded a contract to the BARDELLA CONSTRUCTION CO., Fairmont, W. Va., to grade and construct five miles of electric railway between Waynesburg and Blacksville. The AMERICAN BRIDGE CO. received the contract to build a 140-ft., double-track steel bridge over Tenmile Creek. H. F. STARK CO. has been awarded the contract to grade the remaining eight miles of track on the south end of the line, at Blacksville. Samuel Eakin, Wadestown, W. Va., is Pres.

***Campbelltown,. Pa.**—Bids will be received until 6 p. m., Aug. 17, at the office of H. N. Herr, Engr. of the Lebanon & Campbelltown St. Ry. Co., Hershey Trust Co. Bldg., Hershy, Pa., for the construction of the road bed and laying track for a 9¼-mile railway from Campbelltown to Twelfth St., Lebanon, Pa. Plans and specifications may be seen at the office of the engineer.

**Tacoma Park, D. C.**—The Baltimore & Washington Transit Co. has received a franchise from the Town Council to extend its tracks from the District line and Carrol Ave. to the Washington Sanitorium. William A. Mellen, 516 Colorado Bldg., Washington, is Vice-Pres. and Gen. Mgr.

***Sistersville, W. Va.**—Bids will be received by the Tyler Traction Co., Sistersville, W. Va., until noon, Aug. 8, for the construction of eleven miles of railroad. The work consists principally of approximately 100,000 cu. yds. of excavation, 13,000 cu. yds. of borrow, 11,000 cu. yds. tunnel excavation, 2,000 cu. yds. of bridge and culvert masonry, and the laying of track. Specification and profile can be seen in the office of R. C. Venable, Sistersville, Ch. Engr.

**Weston, W. Va.**—The Morgantown Inter-Urban Ry. Co. has been incorporated for the purpose of constructing a trolley line from Fairmont to Waynesburg by way of Morgantown and Point Marion.

**Gilbertville, Iowa.**—Preliminary and location surveys are now being made by Ralph B. Slippy, Waterloo, for about 16 miles of railway by way of Gilbertville, to be owned by the Waterloo, Cedar Falls & Northern Ry. Co. Bids will probably be received this fall.

**Keokuk, Iowa.** — Right-of-way has been secured for the building of an interurban railway from Rock Island to St. Louis by way of Adams, Pike and Calhoun Counties. It is reported that Stone & Webster, who are financing the Keokuk & Hamilton Water Power Co., Keokuk, are interested in the project. This company will probably supply the power.

**Springfield,. Ill.**—The Springfield & Northwestern Interurban Co. has recently been incorporated by Homer J. Tice, Greenview, S. E. Prather and George L. Harnsberger of Springfield, W. F. Workman, Auburn, and R. Y. Kincaid, Athens. The purpose of the company is to build an interurban railway from Springfield by way of Greenview and Athens to Petersburg and Mason City. About 60% of the right-of-way has been secured, it is stated.

**Milwaukee, Wis.**—The Milwaukee Electric Ry. & Light Co., of which James D. Mortimer is Gen. Mgr., has been granted permission to extend its 27th St. line to the city limits.

**Invergrove, Minn.**—Contracts have been awarded by the St. Paul Ry. Promotion Co. for the construction of the new electric interurban line between Invergrove and Hastings. A franchise permitting the use of streets and alleys in the village for laying tracks has been granted. Work will probably be started within 30 days. The cars of the company will come to St. Paul from Invergrove over the Twin City Rapid Transit Co.'s tracks. From Invergrove they will go on the west side of the river direct to Hastings. This plan will do away with the necessity of building a new bridge at Hastings.

**Sioux Falls, S. Dak.**—F. M. Mills, Pres., Sioux Falls Traction Co., has announced that he will extend the line from the corner of Eleventh St. and Main Ave. north on Main Ave. to Fifth St. and thence east on Fifth to connect with the Phillips Ave. line.

**Minneapolis, Minn.**—A company will be incorporated with a capital stock of $20,000,000 to be known as The St. Louis, Cedar Rapids & Minneapolis R. R. Co. This company has projected an electric railroad between St. Louis and Minneapolis.

**St. Paul, Minn.**—A contract for grading about 35 miles of road between Northfield and Faribault has been awarded to MORRIS & SHEPARD, 801 Globe Bldg., this city by the Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Co. M. W. Savage, Minneapolis, Minn., is Pres.

**Brownsville, Tex.**—The San Benito & Rio Grande Ry. Co. has made application to the City Council for a franchise covering many of the streets of the city for the construction and operation of a system of gasoline motor railway. S. A. Robertson, San Benito, is Pres.

**Hillsboro, Tex.** — The citizens of Hillsboro and adjacent territory have accepted a proposition offered by the Southern Traction Co. to construct an interurban electric railway through Hillsboro, which is a part of a line from Dallas to Waco. The proposition provides that preferred stock of the company to the amount of $75,000 shall be subscribed and the right of way from a point in the northwestern portion of Hill county through the county to a point south of Abbott, including a franchise through the town of Hillsboro be donated. J. F. Strickland of Dallas is Pres.

**Seattle,. Wash.**—The City Council has passed an ordinance granting W. H. Coughlin the right to construct a railway through certain sections of West Michigan St.

**Salem,. Ore.**—The Portland Ry., Light & Power Co. has been granted a franchise to extend its lines on Nebraska and Belmont Sts. B. S. Josselyn, Alder and Seventh Sts., Portland, is Pres.

**Los Angeles, Cal.**—The Pacific Electric Ry. Co. are preparing plans for the construction of an extension on Colton Ave. from Urbita Springs to Colton. G. E. Pillsbury, Los Angeles, is Ch. Engr.

**✚Modesto, Cal.**—A contract to construct a line for the San Joaquin Valley Electric Ry. from Stockton to Modesto, has been awarded to T. V. BEARD, Modesto. Tracy R. Plant, Stockton, is Ch. Engr.

**Woodland, Cal.** — The Vallejo & Northern Ry. Co., Vallejo, has been granted a franchise to extend its line on Main St. from the eastern to the western town limits.

**Harrington, Cal.**—Articles of incorporation of the Colusa & Hamilton Ry. Co. have been filed with the County Clerk. The directors are E. E. Calvin, Horace G. Jenkins, W. R. Scott, C. H. Reding and William Hood. The purpose of the corporation is to construct and operate a standard gage railroad between Harrington, in Colusa County, and Hamilton, in Glenn County, a distanc of 61 miles, making a connection with the Southern Pacific at Harrington.

**Santa .Clara,. Cal.**—A permit has been granted the Southern Pacific Co. to build a spur passing through certain streets. Z. J. Fenton is Clk.

## LIGHT AND POWER PLANTS.

(**Denotes that this work is advertised in Engineering News.*)

**Boston, Mass.**—Bids will be received until 11 a. m., Aug. 19, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for six switchboard feeder panels for the navy yard, Boston. R. C. Hollyday is Ch. of Bureau. Specifications are on file at the office of Engineering News, New York.

**✚Boston, Mass.**—The contract for the heating and ventilating system for the Aquarium at South Boston, was awarded July 13 to LASKEY & McMURRER, at $15,887. The other bids were: L. W. Taylor Co., $17,283; James P. Dwyer, $18,647; Lynch & Woodward, $19,870; J. J. Hurley, $20,540; A. B. Franklin, $21,615; Pierce & Cox, $22,195; Ingalls & Kendricken, $24,240; William H. Gallison Co., $24,590. Robert S. Peabody is Chn. Park Comn.

**New York, N. Y.**—Bids will be received by Michael J. Drummond, Comr. of Public Charities, New York City, until July 28, for furnishing material and instaling two new boilers and accesories in the power house, Metropolitan Hospital Dist. Blackwell's Island.

**New York, N. Y.** — The Long Acre Electric Light & Power Co., 165 Broadway, has applied to the Public Service Commission for permission to issue $50,000,000 bonds, $10,000,000 to be issued at once for the purpose of the erection of an electric light plant. Charles N. Jackson is Supt.

**✚Perrysburg, N. Y.**—A contract for construction of a power-house for the J. N. Adam Memorial Tuberculosis Hospital being erected here by the City of Buffalo, has been awarded to CHARLES A. HAGER, Perrysburg.

**Carthage, N. Y.**—The West End Paper Co. has retained the Stebbins Engineering Co., Watertown, N. Y., to prepare plans for a concrete dam for water power development.

**Olean, N. Y.**—An application has been made to the Public Service Comn., by the Olean Electric Light & Power Co., for permission to issue $185,000 bonds, to be used for the erection of an electric power plant here and the building of a high tension transmission line and a distributing line to Allegheny. A new arc lighting system will be installed.

**Paterson, N. J.**—Bids will be received by William H. Mason, Chm. County Bd. Chosen Freeholders until Aug. 2, for lighting the public boulevards and roads for a period of 1, 3, 5 and 10 years.

**✚Swarthmore, Pa.**—A contract to erect a power plant 61 × 76 ft., at Swarthmore College, to cost $75,000, has been awarded to WILLIAM PROVOSE, Chester, Pa.

***Campbelltown, Pa.**—See item under Electric Railways.

**Security, Md.**—P. O. Keilholtz, Baltimore, Elec. Engr., has completed plans for the proposed power plant of 25,000 HP. capacity to be erected by the Western Maryland Power Co for the purpose of furnishing current for Haggerstown and Frederick railway companies. The estimated cost is $20,000.

**Baltimore, Md.**—Charles W. England, Chn. Sewerage Comn., 904 American Bldg., will receive bids until Aug. 9, for the installation of generators and switchboard in sewage pumping station.

**Takoma Park, D. C.**—The Mayor has been authorized by the Town Council to enter into a contract with the Potomac Electric Power Co. to install 100 lamps of 32 candle-power. Noted June 29.

**Pulaski, Va.**—The construction of five water-power developments and two storage reservoirs on the New River, in Virginia, is contemplated by The Appalachian Power Co. Duplicate transmission lines are also to be erected. H. M. Byllesby & Co., Chicago, Ill., are consulting engineers.

***Sistersville, W .Va.**—See item under Electric Railways.

**Charlotte, N. C.**—The Pearl Cotton Mills and Mill No. 1 of the Erwin Cotton Co. will change to operation by electricity.

**Raleigh, N. C.** — Surveys are being made by the Carolina Power & Light Co. for the erection of a transmission line to extend from Raleigh to Goldsboro.

**Macon, Ga.**—Bids will be received until Sept. 4 for $700,000 bonds, proceeds to be used for the purpose of purchasing the plant of the Macon Gas Light & Water Co. Address the City Clerk. Noted June 1.

**McKenzie, Tenn.**—Bids will be received by the Bd. of Aldermen and Mayor until July 27 for the construction of an electric-light plant and water-works system. C. H. Jenks, Union City, Tenn., is Engr.

**✚Alliance, Ohio.**—A contract for installing new heating and ventilating systems in two of the school buildings has been awarded to FITZPATRICK & HOEPFNER, Columbus.

**Athens, Ohio.**—Bids will be received Aug. 10, care of the Osborn Engineering Co., 20 East Broad St., Columbus, Ohio, for two 125 HP. horizontal tubular boilers, including breeching and a system of steam pipes, for the Athens State Hospital.

**Defiance, .Ohio.**—A $500,000 water power plant to be erected on the Auglaize River, just above Defiance, is contemplated by the Auglaize Powder Co. J. M. Ashley is Pres.

**Mount Vernon, Ohio.**—Bids will be received by the Ohio State Sanatorium Comn., at the office of Dr. C. O. Probst, Secy. State House, Columbus, until

Aug. 12, for furnishing material and installing complete the feed wires and yard lights at the Ohio State Sanatorium near Mount Vernon.

**Columbus, Ohio.**—Bids will be received by H. S. Holton, Dir. Pub. Service, until Aug. 1, for four 75 light rectifier equipments for magnetite lights. 320 magnetite lamps and two synchronous condensers.

**Deland, Ill.**—I. C. Bowsher contemplates building an electric light plant. A 20-year franchise has been granted.

**✚Spooner, Wis.**—A contract has been awarded to the POWER ENGINEERING CO., Minneapolis, Minn., to remodel the municipal electric light and power plant. The present single phase 60-cycle system will be replaced by a three-phase one. The head at the dam will be raised three feet.

**Mora, Minn.**—The city council has granted the Northeastern Minnesota Power Co., a franchise to erect poles and furnish lights and power in Mora. Power will be transmitted from the plant at Chengwatana dam, below Pine City. Similar franchises have been granted by other villages.

**Syracuse, Kan.**—A project to build a water and light plant is on foot, for which bids will be asked, the date of which has not been determined. The cost is estimated at $38,986. J. S. Worley Co., Kansas City, Mo., are the Engrs., and R. M. Van Duzer is City Clk.

**✚Valley City, N. Dak.**—A contract for the installation of electric equipment at the municipal electric lighting plant, for which bids were opened on July 3, has been awarded to BRYAN-MARSH CO.

**Billings, Mont.**—A power line is contemplated by the Great Falls Electric Properties, extending from Billings to Great Falls passing through Judith Gap.

**Austin, Tex.**—The City commission has accepted the proposition of the Hydraulic Properties Co., 60 Broadway, New York, N. Y., for the construction of a dam across the Colorado River and the installation of hydroelectric plant, the agreed consideration being $1,600,000. The proposed contract will be submitted to a vote of the people of the city for ratification or rejection. The date of the election has not yet been named.

**Abilene, Tex.**—Plans are being arranged by local citizens for the development of a natural gas field near Leuders and the piping of the fuel to this city, a distance of 25 miles. The commercial club is interested.

**Floresville, Tex.**—J. H. Bell, San Antonio, will install an electric light plant and ice plant.

**Fort Worth, Tex.**—The Fort Worth Power & Light Co. recently formed, has taken over the holdings of the J. R. Nutt syndicate embracing electric light plant, street railway and franchises. Among the directors of the new company are J. R. Nutt, Cleveland, Ohio, George T. Reynolds, T. B. Yarbrough, W. C. Stripling, John P. King and A. J. Duncan of Fort Worth.

**Menard, Tex.**—E. C. Clark, of Chicago, is arranging to install an electric light plant and ice factory and a waterworks system.

**Clifton, Colo.**—An electric light plant and waterworks are under consideration.

**Denver, Colo.**—The Denver Gas & Electric Co. is planning to rebuild and extend the plant and system of the Denver Steam Heating Co., recently merged with the Denver Gas & Electric Light Co. H. L. Doherty is Pres. The new boulevards when completed will be lighted by this company.

**Phoenix, Ariz.**—Bids will be received until Aug. 6 by Charles A. Van der Veer, Secy. of the Salt River Valley Water-Users Association, for the installation of machinery in the power house, to be erected at Arizona Falls. The estimated cost is $30,000. Plant to develop 900 HP. Separate bids received for power plant.

**Port Orchard, Wash.**—A fanchise has been applied for to the County Commissioners by the Bremertown & Charleston Light & Fuel Co., to erect transmission lines for lighting purposes on certain streets and roads.

**Salem, Ore.**—The Portland Ry., Light & Power Co. will rebuild its plant, which was destroyed by fire. The estimated cost is $65,000. Rollin K. Page, Salem, is Mgr.

**Colton, Cal.**—It is reported that the Southern California Edison Co. will erect a power plant here on its property at M and Eleventh Sts. H. W. Dennis, Los Angeles, is Constr. Engr.

**Fort Miley, Cal.**—Col. George McK. Williamson, Constr. Quartermaster's Dept., is completing plans for an extensive electric light system, including a plant for street and interior lighting, etc., iron and wood poles, transformers and pole lines. Bids will be advertised for at once. The estimated cost is $20,000.

**Keeler, Cal.**—The Nevada-California Power Co. has decided to extend its system in a southerly direction to Keeler and other Southern California points. The offices are located at Tonopah, Nev.

**✚Los Angeles, Cal.**—The Southern California Edison Co. has filed a contract with the DAVIS & FARNUM MFG. CO., for the completion of a 100,000 cu. ft. gas holder and steel tank, on or before Nov. 1

**San Bernardino, Cal.**—An application for a franchise for the erection of electric lines through the streets of San Bernardino has been made to the City Council, by F. A. Worthley.

**Santa Barbara, Cal.**—The Santa Barbara Gas & Electric Corporation will receive bids for furnishing six miles of pipe of various sizes to extend its lines to Montecitio. Geo. W. Wilder is Gen. Mgr.

**✚Sacramento, Cal.**—A contract has been awarded by the Pacific Gas & Electric Corporation to PETERSON CONSTRUCTION CO. for the construction of a gas generator at Front and F Sts, at $8,949.

**Shaver, Cal.**—The San Joaquin Light & Power Co. will establish a hydroelectric plant at Big Creek, near Shaver to supply power around San Francisco Bay and in the Los Angeles district. Geo. C. Newman is Engr.

**San Diego, Cal.**—A conduit system will probably be built in the near future by the San Diego Consolidated Gas & Electric Co., at a cost of about $75,000.

**Sacramento, Cal.**—A new system of lighting the Capitol Grounds will ge installed, which will include a series system in conduit, rectifier outfit, constant current transformer, arc lights for open spaces and tungsten lights for shrubbery. The cost is estimated at $12,000. N. Ellery is State Engr.

**Orillia, Ont.**—Bids will be received until noon, July 27, for the construction of 20 miles of high tension electrical transmission line. Plans and specifications may be seen at the office of W. K. Greenwood, Town Engr.

**Port Stanley, Ont.**—The ratepayers will vote on Aug. 9 on a bylaw authorizing $12,750 for the purpose of establishing a hydroelectric distribution plant.

**✚Stettler, Alta.**—The contracts were awarded by David Mitchell, Town Comr., as follows: For generator, the GENERAL SUPPLIES LTD., $2,625; engine, ROBB ENGINEERING CO., $2,425; boiler, WATEROUS ENGINE WORKS CO., $1,601; poles, WESTERN LUMBER CO., Denver, 35-ft. poles, $4.40 each, 30-ft. poles, $2.40 each; pole line materials and copper wire, CANADIAN GENERAL ELECTRIC CO.; pole line erection, BURNHAM-FRITH CO., $997; transformers, Packard Electric Co., CANADIAN GENERAL ELECTRIC CO., $684; street lighting material, CANADIAN WESTINGHOUSE CO., $360; house meters, CANADIAN GENERAL ELECTRIC CO.

**Oaxaca, Mex.**—The installation of a hydroelectric plant in the Tomellin canyon, is being promoted. A number of provisional contracts for power in the mining districts within a radius of 100 miles have been secured. Maurice Clark is interested.

## BRIDGES.

*(✚Denotes a contract awarded.)*

***✚Bangor, Me.**—We are officially advised that bids for constructing a steel highway bridge of two spans, 217 ft. and 223 ft. long, between the cities of Bangor and Brewer were received on July 24, as follows: (a) plank, (b) wood floor block paving; United Construction Co., Albany, N. Y., (a) $63,500 (b) $69,900; Pennsylvania Bridge Co., Beaver Falls, Pa. (a) $45,777 (b) $49,877; BOSTON BRIDGE CO., Boston, Mass., (a) $45,400 (b) $47,458 (awarded contract). E. E. Greenwood, Skowhegan, Me., is Engr. Noted July 13.

**✚Lowville, N. Y.**—Bids for constructing a concrete bridge have been received as follows: A. S. Nims, Philadelphia, Pa., $11,237; Bale Engineering Co., Utica, N. Y., $9,800; Miller Raleigh & Co., Syracuse, N. Y., $8,934; J. M. FITZGERALD, Sacketts Harbor, N. Y., $8,777 (awarded contract).

**Albany, N. Y.**—The bids received by C. E. Treman, Supt. Public Works, on July 25, for Barge Canal contracts were: Contract No. 85, providing for the construction of a lift bridge over Lock No. 1, at Bridge St., Phoenix; Lupfer & Remick, Buffalo, N. Y., $13,235; Owego Bridge Co., Owego, N. Y., $14,037; W. J. Burns Co., Syracuse, N. Y., $13,881; Engineer's estimate $12,783; Contract No. 86, providing for the reconstruction of a portion of the bridge over the Mohawk River between the villages of Canajoharie and Palatine Bridge; Lupfer & Remick, Buffalo, N. Y., $44,902; Lathrop, Shea & Henwood, Buffalo, N. Y., $43,440; W. J. Burns Co., Syracuse, N. Y., $43,960; N. D. Peters Co., Utica, N. Y., $43,663; Engineer's estimate, $41,871; and Contract No. 88, providing for the reconstruction of a portion of the bridge over the Hudson River at Schuylerville: Altro Construction Co., Troy, N. Y., $21,783; Lathrop, Shea & Henwood Co., Buffalo, N. Y., $24,832; Engineer's estimate, $23,553. John A. Bensel is State Engr. Noted June 22.

**Jersey City, N. J.**—Bids will be received by the Board of Chosen Freeholders until Aug. 1 for building two twin open culvert reinforced-concrete bridges on the Belleville Turnpike Road, between the Newark Turnpike and Saw Mill Creek, known as Bridges A and B. Walter O'Mara is Clk. of Bd.

**Plainfield, N. J.**—Bids will be received by the Board of Chosen Freeholders of Somerset County, until 10.30 a. m., July 27, for constructing a reinforced-concrete arch bridge over Green Brook at Washington Ave., between City of Plainfield and Boro. of North Plainfield, N. J.

**✚Baltimore, Md.**—The contract for the construction of a 50-ft. bridge in connection with the road improvements in Calvert County, has been awarded to F. MULLAN, Dumbarton Ave., Baltimore, Md.

**Bristol, Va.**—Bids will be received by J. L. C. Smith, Chm. St. Com., until 4 p. m., Aug. 23, for constructing three 40-ft. highway bridges.

**Spottsylvania, Va.**—Bids will be received until noon, July 28, for constructing two bridges, as follows: A 142-ft. bridge, steel beam spans, concrete substructure, over Po River, 13½ miles from Fredericksburg; 123-ft. bridge, steel beam spans, concrete substructure, over the North Fork of the North Anna River, about nine miles from Mineral. Plans and specifications are on file with the Childrey-Sunday Co., Richmond, and with the Clerk of the Circuit Court, Spotsylvania. P. St. J. Wilson, Richmond, is State Highway Comr.

**Jacksonville, Fla.**—Bids will be received by the County Commissioners until July 28, for constructing Duval County's part of the bridge contemplated over Nassau River, on Duval Road; a wooden bridge over Dead River, on Duval Road; and for grading the marsh causeway on Duval Road. Gail L. Barnard is County Engr.

**Grenada, Miss.**—Bids will be received by the Board of Supervisors of Grenada County until Aug. 7, for constructing six reinforced-concrete bridges. Albert T. Witbeck is County Engr.

**Bermuda, La.**—Bids will be received by P. E. Prudhomme, Chn. Bridge Comn., Natchitoches, La., until Aug. 31, for the construction of a steel highway bridge over Cane River at Bermuda. Ira W. Sylvester, Alexander, La., is Engr.

**✚Lebanon, Tenn.**—A contract has been awarded to the NASHVILLE BRIDGE CO., Nashville, Tenn., for constructing a 140-ft. steel bridge over Spring Creek.

**Columbus, Ohio.**—Bids will be received by the Board of Commissioners of Franklin County until Aug. 16, for the construction of approaches to the King Ave. Bridge over the Olentangy River between the Clinton Township line and the City of Columbus.

**Hamilton, Ohio.**—Bids will be recived by J. E. Brate, County Audr., until Aug. 9, for constructing the substructure and superstructure of a bridge over Tallawanda Creek, Oxford Township, and one over the M. & E. Canal on Grand Boulevard in the City of Hamilton.

**Portsmouth, Ohio.**—Bids will be received by the Commissioners of Scioto County until Aug. 3 for erecting five bridges.

**Youngstown, Ohio.**—Bids will be received by the County Commissioners until Aug. 7, for constructing the substructure of a bridge on the extension of Dewey Ave. Wm. B. Jones is County Audr.

**Evansville, Ind.**—Bids will be received until July 27 by C. E. Baird, County Audr., for constructing a reinforced-concrete bridge.

**Indiana Harbor, Ind.**—The Chicago, Lake Shore & Eastern Ry. Co. has secured a permit from the government to construct a bridge across the Calumet River.

**Indianapolis, Ind.**—Bids will be received by the Commissioners of Marion County until 10 a. m., July 28, for the construction of a bridge in Township 14 North, and until Aug. 1 for the construction of a bridge in Franklin Township, a bridge and a concrete culvert in Warren, in Wayne and in Perry Townships.

**Plymouth, Ind.**—Bids will be received by the County Comrs. until Aug. 8 for constructing the Downing Ditch arch bridge. C. M. Walker is County Audr.

**Madison, Ind.**—Bids will be received until 1 p. m., Aug. 8, for the construction of a concrete arch bridge in Jackson Township. Andrew M. Taff, is County Audr.

**Rockville, Ind.**—Bids will be received by the Commissioners of Parke County until 1.30 p. m., Aug. 8, for the construction of a concrete arch bridge over Sugar Creek in Sugar Creek Township. J. E. Elder, is County Audr.

**Grand Rapids, Mich.**—We are officially advised that bids will be asked about the middle of August for constructing a 7-span concrete bridge at Leonard St., Grand Rapids, to cost about $125,000. Daniel B. Luten, Indianapolis, Ind., is Design Engr., and L. D. Cutcheon, Grand Rapids, is City Engr.

**Collinsville, Ill.**—Bids will be received by Wm. J. Grenard, Town Clk., until 3 p. m., July 31, for constructing a reinforced-concrete bridge.

**Hillsboro, Ill.**—Bids will be received by G. H. Longwell, City Clk., until 8 p. m., July 31, for constructing a reinforced-concrete bridge.

**✚Watseka, Ill.**—We are officially advised that the contract for constructing a concrete bridge, three 50-ft. spans, has been awarded to JAMES KLEIN, Freeburg, Ill., at $7,890.

***Chicago, Ill.**—Bids will be received until 11 a. m., Aug. 5, by the City of Chicago at 406 City Hall, for furnishing, delivering and building in place all temporary work and the construction and erection of a substructure for a bascule bridge over the South Branch of the Chicago River at Washington St. L. E. McCann is C[illegible] of Public Works. For details, see [illegible]vertisement in this issue.

**Hudson, Wis.**—The ci[illegible] considering the construction [illegible] bridge to cost $120,000, on Walnu[illegible] across the St. Croix River.

**Albert Lea, Minn.**—Bi[illegible] will be received by the city unti[illegible] [illegible]g. 4 for a concrete and steel bri[illegible] and dam. William Barneck is City [illegible]gr.

**Omaha, Neb.**—Bids w[illegible] be received by the County Comm[illegible]ners until Aug. 5, for constructi[illegible] [illegible]nty bridges that may be ordered [illegible] the year. D. A. Haverly is Count[illegible] [illegible]lk.

**✚Watertown, S. Dak.**—We are officially advised that th[illegible] [illegible]ntract for constructing all bridges for the year has been awarded to [illegible] SECURITY BRIDGE CO., Minneapolis, Minn.

**Muskogee, Okla.**—Bids will be received by W. E. Looper, County Clk., until Aug 5, for constru[illegible]g two steel bridges, one across Cood[illegible] Creek, 50 ft. long and 14 ft. wide, and [illegible]ther across branch of Elk Creek, 42 ft. long and 14 ft. wide. S. C. Pitts is County Engr.

**✚Roswell, N. Mex.**—The County Commissioners have awarded a contract to the MIDLAND BRIDGE CO., of Kansas City, Mo., for the erection of a bridge over the South Berrendo River, at $6,228. The bridge is to be steel, with three spans, one 100 ft., one 60 ft. and the other 30 ft., with an 18-ft. roadway.

**San Andreas, Cal.**—Bids will be received by the Clerk of the Board of Supervisors of Calaveras County until 1 p. m., Aug. 7, for the construction of a reinforced-concrete bridge of three spans, 100 ft. each over the Calaveras River near the town of Jenny Lind, on the Jenny Lind- Milton Road, and for the construction of a steel bridge of two spans of 153 ft. each in the same place. A. W. Poe is Clk.

**✚Vacaville, Cal.**—We are officially advised that contracts have been awarded as follows: Main St. bridge, 40-ft. reinforced-concrete arch, to the GILDERSLEEVE CONSTRUCTION CO., at $7,850; McClellan St. bridge, 40-ft. reinforced-concrete arch, and one reinforced-concrete culvert, EASTERLY CONSTRUCTION CO., $5,300. The total bids received were as follows: American Construction, $13,750; Esterly Construction Co., $14,000; Gildersleeve Construction Co., $13,850; R. R. Beard, $16,976.

**✚Sorel, Que.**—We are officially advised that a contract for reconstructing one of the piers of the bridge spanning the Yamarka River about ten miles from Sorel, has been awarded to THE FOUNDATION CO., 115 Broadway, New York. The new pier will be 33 ft. 8 in. long, 10 ft. wide and 32 ft. 9 in. high.

## BUILDINGS.

*(*Denotes that this work is advertised in Engineering News.)*

**Waterville, Me.**—Bids were received as follows on July 20, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Waterville, Me.: (a) limestone; (b) sandstone: Ambrose B. Stannard, New York, (a) $78,000, (b) $80,000; Woodberry & Leighton, Boston, (a) $75,956; William H. Fissell & Co., New York, (a) $89,900, (b) $93,500; King Lumber Co., Charlottesville, Va., (a) $89,066, (b) $91,000; Horace Purinton Co., Waterville, Me., (a) $74,683, (b) same; Conners Bros. Co., Lowell, Mass., (a) $82,150.

**✚Portland, Me.**—The contract for the bank building on Main St. for the Security Trust Co. has been awarded to the F. A. RUMERY CO. To be of brick and stone, two stories, 29 × 61 ft., to cost $30,500. R. Clifton Sturgis, 120 Boylston St., Boston, is Arch., and French & Hubbard, Albany Bldg., Boston, are Engrs.

**Amherst, Mass.**—Plans are being drawn for a society building for the Psi Upsilon Fraternity of Amherst College, to cost $70,000. Putnam & Cox, 8 Hancock Ave., Boston, are Archs.

**Boston, Mass.**—Work will soon be begun on two apartment blocks on Russell St., to cost $40,000, to be of brick, five stories, 21 × 90 ft. Thomas M. Smith is owner and Silverman Engineering Co. are Archs.

**Braintree, Mass.**—$65,000 has just been raised to be spent in school houses.

**✚Brookline, Mass.**—The contract for the 6-apartment block on Beven St. and Fairbanks St. has been awarded to FREDERICK E. JOHNSTON, to be of brick and stone, three stories, 60 × 80 ft., to cost $30,000. Ellen A. Johnston is owner.

**Chicopee, Mass.**—Kirkham & Parlett, of Springfield, Mass., are completing plans for the library building for the city of Chicopee. It will be of red Howard brick with limestone trim and a copper roof, one story high and will contain two large reading rooms beside those usually installed in a library.

**Great Barrington, Mass.**—Plans will be ready for contracts in about a month for the library building, to be of brick and local stone, two and one-half stories, 78 x 52 ft., to cost $50,000. Barnes & Blanchard, 15 West 39th St., New York, are Archs.

**✦Holyoke, Mass.**—Israel Ducharme, general contractor for the new apartment block of Dr. G. C. Roberts at Cabot and Chestnut Sts., has awarded sub-contracts as follows: Mason work, J. J. PREW; cut stone, DAVID McCORMICK & SON; iron work, roofing and plumbing; E. H. FRIEDRICH; heating, T. F. KILBRIDE; electrical work, H. F. HASKELL. The building wil be five stories high, 100 × 110 ft. George P. B. Alderman & Bro. are the Archs. Noted Mar. 23.

**Huntington, Mass.**—The town is about to expend $100,000 for increased school accommodations.

**Melrose, Mass.**—The Order of Elks plan a brick headquarters building on Main St., to cost $30,000.

**✦Boston, Mass.**—The contract for the block for Ginn Publishing Co., at Chambers and Poplar Sts., has been awarded to J. CADDIGAN & SON, 95 Milk St. To be of brick, five stories, 134 × 110 ft. Ernest Flagg, 109 Broad St., New York, is Arch.

✦The contract for the public garage to be built on Beacon St. for Hon. Eugene N. Foss has been awarded to WHIDDEN & CO. To be of brick and stone, 60 × 100 ft., to cost $50,000. Arthur H. Bowditch, 7 Water St., is Arch.

Work will soon be begun on a reinforced concrete apartment block on Smith St. To be 60 × 115 ft., four stories, to cost $40,000. F. A. Luck, 179 Summer St., is Trustee.

An 11-story office building, of brick and stone, to cost $200,000, is to be erected at the corner of Beach St. and Harrison Ave. W. Stanley Tripp, 95 Milk St., is the owner.

**Greenfield, Mass.**—Contracts will soon be let for the construction of a theater on Federal St. for Lawler Bros. To be four stories, of brick, to cost $50,000. Lucius L. Bridge, 456 Sumner Ave., Springfield, is Arch.

**Fall River, Mass.**—It is contemplated by St. Ann's R. C. Church Society to spend $100,000 for a school building and a home for the brothers on Forest St.

**✦Worcester, Mass.**—A 6-apartment building is to be erected on William St. for E. F. Matthews. Contract has been awarded to J. J. Higgins, 518 Main St. Edward P. Fitzgerald is Arch.

**✦West Boylston, Mass.**—The contract for the Beaman Memorial Librar building has been awarded to the E. J. CROSS CO., INC., Worcester. Frost, Briggs & Chamberlain, State Bldg., Worcester, are Archs.

**Springfield, Mass.**—George B. Allen, Arch. and Engr., Hartford, Conn., has completed plans for a new storehouse for the Central Storage Warehouse. The building will be of brick, semi-fireproof construction, 36 × 80 ft., four stories high, with reinforced-concrete floors and a freight elevator. The town has voted to purchase a site adjoining the present high school for the erection of a grammar school, to cost about $40,000, and will probably be of native sandstone. The building committee consists of J. R. Ensign, Horace Belden and A. T. Pattison.

**Hartford, Conn.**—Samuel M. Green, Inc., Archs., Springfield, Mass., are preparing plans for the proposed Allyn House, to be erected at Asylum and Trumbull Sts., for the Allyn Estate. The plans provide for a building fronting 180 ft. on Trumbull St. and 150 ft. on Asylum St., ten stories high, of tapestry brick, with Ohio sandstone trim. A section 80 × 150 ft. fronting on Trumbull St. will be erected first so as to allow of using the present building until the completion of the new section which will have 180 rooms, each with private bath. The building will be of absolute fireproof construction and will have four elevators.

**New Haven, Conn.**—L. W. Robinson, Arch., 324 Exchange Bldg., this city, is preparing plans for the proposed isolating hospital, to be erected in this city. The structure will be of brick and steel, three stories high, 50 x 140 ft., with gravel roof and a refrigerating plant. The cost is expected to be about $75,000. Eli Whitney is president of the association, and F. M. Day, 925 Chestnut St., Philadelphia, Pa., is the Consulting Engineer.

Bids are now being received by Delano & Aldrich, Archs., 4 East 39th St., New York, for the erection of the new Wright Memorial Dormitory at Yale University. The structure will be of brick and steel, 36 × 152 ft., five stories high, with an ell 42 × 80 ft., steam heat and slate roof. The cost is estimated at $250,000. Noted Mar. 16.

Estimates are being received on plans drawn by C. C. Haight, Arch., 452 Fifth Ave., New York, for the laboratory at Yale University. The building will be of brick and steel, four stories high, and will cost about $500,000, it is estimated.

**Norwich, Conn.**—Arch. C. H. Preston is preparing plans for a large brick block for Judge John M. Thayer, at Franklin and Bath Sts. The building will be about 100 × 150 ft., with face brick on two sides.

**Hempstead, L. I., N. Y.**—At a special election the taxpayers voted to build a school. Bonds for $55,000 will be issued for the purpose.

**New Rochelle, N. Y.**—Barnard & Wilder, of New Rochelle, have been engaged to design three shore front dwellings on the property of the Indian Point Improvement Co. at Riverside, Conn. These dwellings are to be located on the water front on plots of about one and one-half acres of ground and, together with the garage and gate lodge which goes with each, are to cost $60,000.

**Schenectady, N. Y.**—Bids were received as follows on July 25, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office building at Schenectady, N. Y.: (a) limestone; (b) sandstone: Conners Bros. Co., Lowell, Mass., (a) $148,500; J. E. & A. L. Pennock, Philadelphia, (a) $138,500, (b) $140,640; Durolithic Co., Buffalo, N. Y., (a) $134,240, (b) $138,000; Wills & Marvin Co., New York, (a) $142,000; J. H. McHale & Sons, Syracuse, N. Y., (a) $139,703; Charles W. Peckworth, New York, (a) $138,246; Westchester Engineering Co., New York, (a) $138,300, (b) $144,300; Interstate Construction Co., Saginaw, Mich., (a) $138,555, (b) same; Richard E. Henningham, New York, (a) $143,000; Charles McCaul Co., Philadelphia, (a) $133,663, (b) $139,663

**Peekskill, N. Y.**—Bids will be received until Aug. 23 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the alterations and repairs of the U. S. post-office at Peekskill, N. Y. Drawings and specification may be obtained from the Custodian at Peekskill, N. Y., or at the discretion of the Superv. Arch.

**✦Syracuse, N. Y.**—The R. H. HOWES CONSTRUCTION CO., New York City, has received contract for erection of Dey Bros. & Co.'s 8-story and basement addition to their department store, 50 × 148 ft., on South Warren St., to cost $125,000.

**White Plains, N. Y.**—At a special school meeting the taxpayers voted to appropriate $45,000 for a new school on the south side and $10,000 for one on the north side of the village.

**New York, N. Y.**—Plans are being prepared by Gaetan Ajello, 1 West 34th St., for the construction of a 12-story fireproof brick and terra cotta apartment house on Riverside Drive and 114th St. The cost is about $1,000,000.

Bids are being received by Ludlow & Peabody, 12 West 31st St., for interior alterations to be made on the church at 86th St. and Amsterdam Ave. for the Park Presbyterian Church, corner 86th St. and Amsterdam Ave. Rev. A. P. Atterbury, 145 West 86th St., is the Pastor.

Plans have been completed by A. N. Allen, 2 and 4 West 45th St., for the construction of a 12-story brick and stone loft building at Madison Ave. and 41st St. James C. Colgate, 36 Wall St., is owner. The general contract is held by WILLIAM CRAWFORD, 5 East 42d St.

Charles Hensle, 3200 Broadway, will erect flats at the northwest corner of Nagle Ave. and Arden St. The architect has not been selected.

**Albany, N. Y.**—George Addington, Chn., Bld. Com., 34 Beaver St., Albany, is asking for bids until 2 p. m., Aug. 24, for the construction of a building for the use of the B. P. O. of Elks, on State St., this city. Bids will also be received at the same time for plumbing, gas, water pipes, fixtures, etc.; also for heating and electric work, electric elevators, bowling alleys, etc. William Condon is Secy. M. L. & H. G. Emery, 12 Drislane Bldg., Albany, are Archs.

**Buffalo, N. Y.**—Colson & Hudson, Archs., 35 Dun Bldg., have completed plans and are receiving bids for a store and office building, 63 × 100 ft., 3-story and basement, structural steel, brick and terra cotta, to be erected at 733-735 Main St., by Allen A. Keapp, 107 Erie County Bank Bldg.

**Newark, N. Y.**—M. H. Hubbard, Arch., Utica, N. Y., is preparing plans for a brick and stone church, 109 × 103 ft., 1-story and basement, to be erected by the First Baptist Church Society. Estimated cost, $55,000.

**Ogdensburg, N. Y.**—John Hannan has plans in preparation for a storage warehouse, 50 × 100 ft., 3-story, brick and steel construction, which he will erect for the International Harvester Co., lessee.

***Perry, N. Y.**—Bids will be received until 1 p. m., Aug. 5, for the erection and completion of a village building. Plans and specifications can be seen at the office of O. N. Bolton, Village Clk., or at the office of F. W. Kirkland, Arch., Rome, N. Y., and at the office of H. C. Kittredge, 815 German Insurance Bldg., Rochester, N. Y. Proposals will be required for building complete, including heating, plumbing, etc., but the contractor will submit a separate figure on the heating and plumbing and electrical work.

**Hoboken, N. J.**—It is reported that plans and specifications have been adopted by the Common Council for the construction of a City Hall at Hoboken. The plans were prepared by Schneider & Dieffenbach, 220 Broadway, New York City.

**Frankford, Pa.**—The Hebrew congregation of Frankford has had plans prepared by Arch. Louis V. Scherr for a brick and plaster synagogue, to be erected at 4336-38 Paul St., Frankford.

**✦Philadelphia, Pa.**—The contract is held by F. A. HAVENS & CO. for a 1-story fireproof film storage building, to be built at 20th St. and Indiana Ave., for the Lubin Manufacturing Co. The building will be a reinforced concrete, 130 × 30 t. in dimensions.

**Pittsburg, Pa.**—It is reported that E. C. Brainerd has sold to the Zemmer Co., Century Bldg., manufacturing chemists, a site, 60 × 110 ft., in Louisa St., opposite Forbes Field entrance and adjoining the automobile establishment of Thompson & Co., for $24,000. The company's architects have planned a 4-story fireproof building, to cost $50,000.

**✦Philadelphia, Pa.**—The contract for the erection of the West Philadelphia high school building, at 47th and Walnut Sts., was awarded to CRAMP & CO. The contract provides for two brick and limestone buildings, one for boys and the other for girls, with a central power plant connecting the two. The contract price is $1,126,150.

**Baltimore, Md.**—Daniel W. Dryer, 14 East Lexington St., is having plans and specifications prepared by Hy. J. Tinley, Arch., 314 North Charles St., for nine 2-story dwellings, to be erected at Arlington Ave., Govans; will be of brick construction, slag roof, steam heat, electric lighting, plumbing, concrete foundation. Cost, $50,000; plans are ready.

Albert Bondy, 1933 Madison Ave., is having plans and specifications prepared by Theodore Wells Pietsch, Arch., 1001 American Bldg., for apartment house, to be erected on Eutaw Place, near Druid Hill Ave.; will be of brick construction, ten stories, slate roof, steam heat, gas and electric lighting, plumbing; cost, $200,000.

Ford's Opera House, Charles E. Ford, Mgr., Fayette and Eutaw St., will make improvements to the theatre, including installation of cement floors and walls, making entire structure fireproof, converting balcony into marquise, installation of stone steps near interior areas, etc.; tentative plans in progress.

**Roland Park, Md.**—Roland Park Co., 408 Roland Ave., Roland Park, Md., are having plans and specifications prepared by E. L. Palmer, Jr., Arch., Roland Park, for eight 3-story dwellings, concrete and stucco construction, slate roof, steam heat, electric lighting, plumbing; cost, $100,000. Plans will be completed shortly.

**Baltimore, Md.**—McLaughlin Bros., Inc., Archs., 916 Bolton St., have completed plans and specifications for a warehouse to cost about $60,000, to be erected at 603 North Calvert St., for the Southern Supply Co., Calvert and Saratoga Sts. The structure will be of brick and stone construction, four stories, slate roof, steam heat, gas and electric lighting, plumbing. Building will be occupied by the Independent Casket Co. Contract for erection has been awarded to McLaughlin Bros. Inc., the architects.

**✦Clifton Forge, Va.**—City has awarded contract to W. R. MANN, Covington, Va., for the erection of proposed high school building, brick construction, hot air heat, electric lighting, plumbing. Plans by H. C. Allen, Hot Springs, Va.

**Richmond, Va.**—The contract for the construction of the 18-story skyscraper for the First National Bank Building Corporation was awarded to the GEORGE A. FULLER CO., of New York City, for $800,000. This company is now engaged in building a new home of the Life Insurance Co. of Virginia, in this city. Work on the bank building will begin at once, and the structure is to be completed by July 1, next year.

**Norfolk, Va.**—Auditorium Committee of City Council, H. W. Trice, Chn., is promoting erection of combination market and auditorium building; seating capacity, 7,500; fireproof construction, steam heat, electric lighting; cost, $150,000. Plans by B. F. Mitchell, 500 Seaboard Bank Bldg., Norfolk, Va.

✦S. Goleski, Norfolk, Va., has plans by C. K. Howells, Richmond, Va., for Victoria Theater, 173 × 60 ft.; stage, 31 × 57 ft., and 52 ft. high; main entrance to be 2-story dome effect, steam heat, electric work, slag roof; cost, $60,000. E. J. RONEY, Richmond, Va., is contractor.

M. L. Hofheimer, Richmond, Va., has plans and specifications by C. K. Howell, of Richmond, Va., for theater and store building, to be erected on Granby St., between Freemason and Charlotte Sts., 185 × 55 ft.; theater proper will be 130 × 55 ft., approached by arcade entrance, on either side of which will be 55-ft. stores; seating capacity, 1,400; cost, $60,000.

The Board of Control purchased site on Butte St., between Cumberland and St. Paul Sts., and will erect fire station. It will replace present Queen St. station; will be of brick and stone construction, two stories, steam heat, gas and electric lighting and plumbing.

**✦Richmond, Va.**—John A. Hutchinson awarded contract to IRVING D. IRELAND, Richmond, Va., to erect warehouse; reinforced concrete, two stories and basement, 165 × 122 ft.; fireproof construction, electric elevator and lights; capacity for 5,000 hogsheads of tobacco and sales capacity of 400,000 lbs. of tobacco daily; lighted by 82 windows and skylight.

The School Board has plans and specifications by Carneal & Johnson, Richmond, Va., for school on Bellevue School site, 24 rooms, to accommodate 1,000 pupils; Gothic style, dark red fire brick with white putty joints, terra cotta exterior trimming and entrance, fireproof construction.

**Woodstock, Va.**—City will erect municipal building to contain fire department, opera house, store room, lodge room, etc. Address Jos. B. Clower.

***Eufaula, Ala.**—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Aug. 30, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. postoffice at Eufaula, in accordance with drawings and specifications, copies of which may be obtained from the custodian of the site at Eufaula, or at the office of the Supervising Architect.

**Clarksdale, Miss.**—Bids will be received until July 27 by the Yazoo Mississippi Delta Levee Board for erecting a 2-story fireproof office building on First St. and Delta Ave. Shaw & Pheil, Archs., 1503 Tennessee Trust Bldg., Memphis, Tenn.

**Knoxville, Ia.**—Bids will be received until July 27 by Bert McCoy, City Clk., for erecting a building to be used as a city building and a fire station.

**East Liverpool, Ohio.**—It is stated that a site has been purchased at West Fifth and Jackson Sts. for the erection of Y. M. C. A. building to cost $100,000. W. E. Wells is Chn. Bldg. Com.

**New Philadelphia, Ohio.**—It is reported that bids will be received by the Board County Commissioners, until July 31, for remodeling the jail. E. R. Mathias, Cleveland, Ohio, is Arch.

**Bowling Green, Ohio.**—Architects Howard & Merriam, of Columbus, Ohio, have been commissioned to draw plans and specifications for a State normal school, to be erected at Bowling Green, to consist of ten main buildings, and to cost about $250,000 in toto.

**Brazil, Ind.**—The Commissioners of Clay County are asking for bids until Aug. 8 for remodeling and repairing the county jail. Elmer A. Staggs is Audr.

**Elizabethtown, Ind.**—The School Board is asking for bids for the construction of a new school building.

**Indianapolis, Ind.**—The City Council has appropriated $105,000 for the construction of an addition to the city hospital. Bids will be asked soon by the Board of Public Works.

**Kokomo, Ind.**—The trustees of the Catholic Church will soon ask for bids for the construction of a modern hospital.

**Laporte, Ind.**—Samuel Steinberg and James Levine have received plans on which they will soon ask for bids for the construction of a modern theatre building. Hall & Westerland, Chicago, Ill., are Archs.

**Lawrenceburg, Ind.**—The trustees of the Green Chapel Methodist Episcopal Church have approved the plans for the erection of a new and modern church.

**Muncie, Ind.**—The Lake Erie & Western R. R. Co., is preparing to construct a new and extensive freight depot here. W. A. Terry, Asst. Mgr. Freight Traffic, Chicago, will let the contract.

**Rushville, Ind.**—The Trustee of Richland Township is preparing to let a contract for a new school building.

**Terre Haute, Ind.**—John T. Beasley has ordered plans on which he will ask for bids for a new arcade office building. Estimated cost, $60,000. D. H. Burhan & Co., Chicago, Ill., are Archs.

**South Bend, Ind.**—The Board of Education will soon ask for bids for the construction of a $300,000 high school building. The contract will be let in September. W. B. Itmer, St. Louis, Mo., is Arch. The building will be three and four stories in height and of vitrified brick and stone.

**Indianapolis,. Ind.**—The Board of School Commissioners has adopted a resolution authorizing a bond issue of $125,000 for purchase of additional ground at St. Clair and Pennsylvania Sts. as a site for a public library.

**Princeton, Ind.**—James Knox Taylor will receive bids until Aug. 10 (extension of date from Aug. 3) for construction, complete, of U. S. post-office at Princeton.

**Alpena, Mich.**—Bids were received as follows, on July 21, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Alpena, Mich.: (a) limestone, (b) sandstone: James Corse, Racine, Wis., (a) $80,679, (b) $83,178; King Lumber Co., Charlottesville, Va., (a) $89,000, (b) $92,000; General Construction Co., Milwaukee, Wis., (a) $92,270, (b) $95,270; Interstate Construction Co., Saginaw, Mich., (b) $86,869.

**✦Coldwater, Mich.**—WILLIAM PRESTON has secured from the Western Reserve Milk Co., of Cleveland, Ohio, a contract providing for the construction of a brick warehouse upon the local company's property, to be 40 × 110 ft. in dimensions. The contract provides that this building shall be completed by Oct. 1.

**Holland, Mich.**—The U. B. A. Home Board intends building on East Fulton St. a home. Plans by Osgood & Osgood, Widdicomb Bldg., Grand Rapids. The cost is $50,000.

**Monroe, Mich.**—Bids will be received until Aug. 29 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures), of the U. S. post-office at Monroe, Mich.

Drawings and specification may be had from the Custodian of site at Monroe, or at the discretion of the Supervising Arch.

**Freeport, Ill.** — JOSEPH A. HILDEBRANDT has been awarded the contract to build the new St. Vincent Orphanage. The contract was let recently by Bishop Muldoon and William F. Gubbins, the latter being the architect. The building, when completed, will cost $100,000.

**+Madison, Wis.**—L. D. GILBERT, of Madison, has secured the contract to erect a hospital for the Sisters, which will cost $150,000.

**Milwaukee, Wis.**—Kirchhoff & Rose, Archs., Majestic Bldg., are ready for bids for the erection of the new Second Ward Savings Bank's new structure at West Water, Third and Cedar Sts. It will be of reinforced concrete construction, triangular in shape, two stories high, with foundations for an 8-story building. New vaults, safe deposit system, furniture, etc. August H. Uihlein is Pres.

**Milwaukee, Wis.**—It is reported that an 8-story building, to cost approximately $300,000 will be erected on the southeast corner of Grand Ave. and Second St. Stumpf & Langhoff will, it is reported, occupy the main floor.

**Oakdale, Iowa.**—Bids will be received until Aug. 1 by H. F. Liebbe, State Arch. Capitol, Des Moines for a brick laundry, frame dairy barn, etc., at the State Sanitarium, Oakdale.

**Canby, Minn.**—Bids will be received Aug. 3 by M. Lundring, Mayor, for erecting a brick, stone and concrete city jail. J. E. Nason, 622 Corn Exchange, Minneapolis, is Arch.

**Minneapolis, Minn.**—The establishment of a Lutheran hospital on Hoffman Ave., near Maria Ave., St. Paul, is contemplated by the representatives of the St. Paul Lutheran Church, Margaret and Hope St. The cost will be about $100,000.

**+St. Paul, Minn.**—The State Board of Control awarded the contract to F. C. NORLANDER, Bradley and Lawson Sts., St. Paul, at $49,800 for the completion of the administration building at the State Boys' Reformatory at St. Cloud, Minn. C. H. Johnston is State Arch.

**+Lead, S. Dak.**—MULLEN & ROURKE of Deadwood have been awarded the contract for the erection of the federal building here which is to cost approximately $75,000. The building will be located at the corner of Main and Stone St., and work upon it will be commenced probably the latter part of the month. This is the second time the contract has been let as the first contractor, J. H. Weiss of South Omaha, later decided not to accept the award.

**Jamestown, N. D.**—Bids will be received July 27 by Board of Control at Bismarck, for erecting a 40 x 60-ft. addition to the laundry building at the State Hospital for the Insane at Jamestown. Hancock Bros., of Fargo, Archs. F. L. Brandt, Secy.

**St. Louis, Mo.**—The Rice-Stix Dry Goods Co. obtained a permit for the 5-story factory which it will build at 2836-50 South Jefferson Ave. It will be a fireproof building, and cost $70,000. The factory will make shirts and will be the fourth factory which the company has in St. Louis.

**Houston, Tex.**—Press reports state that plans are being prepared for the construction of a 10-story warehouse, to be erected on San Jacinto St., near Commerce. The Sig Westheimer Transfer Co. is the owner. The structure is to be, according to the plans, 35 x 100 ft., facing San Jacinto St., and with side entrances and rear elevator doorways, ten stories in height, with the lower floor for the offices of the transfer company and the nine stories for storage and warehousing. Each floor of the nine stories is to be divided into a number of rooms, each of them arranged for caring for household goods, merchandise and pianos. The number of rooms on each floor will differ with the smaller ones toward the top.

**Cleburne, Tex.**—Bids were received as follows on July 25 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Cleburne, Tex.: Texas Bldg Co., Fort Worth, Tex., (a) $92,900, (b) $96,150; Fell & Ainsworth, Waco, Tex. (a) $84,000, (b) $87,000; E. J. Zimmerman, Cleburne, Tex., (a) $92,923, (b) $95,775; Newport Contracting & Engineering Co., Newport News, Va., (a) $77,510, (b) $81,570; John Bardon, Fort Worth, Tex., (a) $74,900, (b) $77,900; M. B. Whitlock, Denton, Tex., (a) $83,711. (a) limestone; (b) sandstone.

**Denver, Colo.**—William E. and Arthur A. Fisher, Railway Exchange Bldg., have prepared plans for the 12-story white marble bank building which is to be erected at 17th and California Sts. for the International Trust Co. at an approximate cost of $250,000.

**Boise, Idaho.**—Arch. Fourtellatte & Hummel, Overland Bldg., are preparing plans for a group of state capital buildings to be erected here.

**San Jose, Cal.**—Bids will be received until Aug. 19 by the State for the construction of a State Training School Building here. The structure will be of reinforced-concrete construction, 100 x 100 ft. N. Ellery is State Engr., Sacramento.

**Oakland, Cal.**—The Pacific Gas & Electric Co., 13th St. and Broadway, has been granted a permit for the erection by days' work, of an addition to their steel and concrete building at First and Jefferson Sts. Cost, $40,000.

**+San Diego, Cal.**—The F. O. ENGSTROM CO., Fifth and Seaton St., were awarded a supplemental contract for additional work amounting to $295,000 in connection with the erection of the 6-story concrete theater and office building being erected in San Diego by J. D. Spreckels, of San Francisco. The contract for five electric passenger and five sidewalk elevators was awarded to the LLEWELLYN IRON WORKS, at $39,750. Harrison Albright is Arch.

**San Francisco, Cal.**—Masow & Morrison, Monadnock Bldg., have taken out a permit for the erection by day work of a 5-story brick loft building on Battery St., at a cost of $75,000. E. E. McManus, Humboldt Bank Bldg., is the Arch.

Reid Bros., Call Bldg., Archs., have prepared plans and specifications for a 6-story brick and steel hotel, to be erected on Mission St. Estimated cost, $60,000.

J. B. Randell, Arch., is preparing plans for a number of men (who will soon be incorporated and of whom Kahn & Feeder Co., 211 Montgomery St., are associated) for a modern auditorium to be constructed at the corner of Post and Steiner Sts., at a cost of $500,000. The building to be 137½ x 275 ft., of steel and concrete construction.

A building permit has been issued to G. E. Turnan, 125 Sutter St., for the erection by day's work of a 7-story brick hotel building on Sutter St. Cost, $115,000. Creighton Withers is the Arch.

+Hart & Boehrer, Archs., 417 Montgomery St., awarded a contract to Q. O. FIELD, of San Jose, for the concrete work for the Odd Fellows Home, to be erected at Santa Clara. Mr. Field's bid was $57,540.

**Santa Monica, Cal.**—It is reported the Home Telephone Co. will erect a large building to house their entire bay district.

**+Ventura, Cal.**—The LOS ANGELES PLANING MILL CO. was awarded the contract at $50,600 for the erection of the reinforced concrete structure of the Ventura County Court House at Ventura.

**San Francisco, Cal.**—Plans have just been prepared by Arch. Willis Polk for an 8-story hotel to be built in the north side of Sutter St., between Montgomery and Kearny on the lot owned by the regents of the University of California. The lot has a frontage of 103 ft. in Sutter St., with a depth of 137½ feet, and extensions to Hardy and Trinity places.

**San Francisco, Cal.**—Arch. Bliss & Faville, Balboa Bldg., have received from London, England, preliminary drawings for the London, Liverpool and Globe Insurance Co.'s new building to be erected on California St., at a cost of $150,000. Bliss & Faville will prepare the working drawings for the building, which will be of monumental type, and class A construction.

**Dundas, Ont.**—Bids will be received until Aug. 8, by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, for the construction of a public building. Plans, specifications, may be seen on application at office of Thomas A. Hastings, Clerk Works, Postal Station, Toronto, or Dept., Ottawa.

**Tilbury, Ont.**—Bids will be received by R. C. Desrochers, Secy. Dept. of Public Wks., until 4 p. m., Aug. 8, for the construction of a public building. Plans and specifications may be seen at the office of H. I. Lamb, Dis. Engr., London, Ont.

**Victoria, B. C.**—Bids will be received until Aug. 15 by the Minister of Public Works, for erecting an addition to the Parliament Buildings. J. E. Griffith, Pub. Wks. Engr.

**Halifax, N. S.**—Bids will be received until Aug. 1, by L. K. Jones, Secy. Dept. Rys. and Canals, Ottawa, for the construction of a freight shed at Halifax. Plans, specifications, etc., on application at office of Chief Engineer, Dept. Rys. and Canals, Ottawa, Ont., or at office of the Chief Engr., Intercolonial Ry., Moncton, N. B.

## WATER SUPPLY—IRRIGATION.

*(+Denotes a contract awarded.)*

**+Bingham, Me.**—We are officially advised that CHARLES N. TAYLOR, Contracting Engr., Wellesley, Mass., has been awarded the contract by the Bingham Water District, Bingham, to construct a water system, consisting of about six miles of cast-iron water pipe, building concrete dam and 400,000-gallon reservoir. Work will be started at once.

***Pittsfield, Mass.**—Bids will be received by the Board of Public Works until 2 p. m., Aug. 7, for laying water pipe in the towns of Lenox and Washington, Mass. A. B. Farnham is Engr., Bd.

**+Boston, Mass.**—Bids were received on July 14 by the city for laying 2,500 ft. of 8 and 12-in. water pipe in various streets. The contract has been awarded to JOHN A. COSTELLO & CO. L. K. Rourke is Comr. Bd. Pub. Wks.

**Lowell, Mass.**—The Committee on Appropriations has voted to recommend that the Water Board be granted $100,000 for new wells, a new reservoir and a new pumping station. Robert Thomas is Supt- Water-Wks.

**Shelburne Falls, Mass.**—The Governor has signed the bill authorizing the Fire District to install a gravity water supply system for domestic, fire and manufacturing purposes.

***Athol, Mass.**—Bids will be received by the Board of Water Commissioners until 2 p. m., Aug. 1, for furnishing 320 tons of 12-in. c. i. pipe and special castings. Specifications may be had upon application to the Board, H. L. Hapgood, Chn. James L. Tighe, is Engr., Holyoke, Mass.

**Boston, Mass.**—Bids will be received until July 28, by the city, for laying about 3,000 ft. of 4, 8, 10 and 12-in. pipe in various streets. L. K. Rourke is Comr. Pub. Wks.

+The contract for 125 tons of meter frames and covers was awarded on July 20 to MECHANICS IRON FOUNDRY CO., at 2½ cts. per lb. The Lumsden & Van Stone Co. submitted a bid of 3.15 cts.

**Southington, Conn.**—Bonds for $220,000 for water improvements have been sold by the city.

***Matteawan, N. Y.**—Bids will be received by the Board of Trustees until Aug. 22, for furnishing and laying about 22,000 ft. of 4, 6 and 8-in. c.-i. water pipe and fittings; also for 5,700 ft. of 24-in. vitrified sewer pipe. B. I. D. Roosa is Clk.

**Wellsville, N. Y.**—Charles C. Hopkins, Consult. Engr., 343 Cutler Bldg., Rochester, N. Y., is preparing plans for the construction of a municipal water supply system here. Estimated cost, about $200,000.

**Angola, N. Y.**—The village has been authorized to issue bonds for $55,000 for the installation of a water-works system.

***Madison Barracks** (Sackett Harbor post-office), **N. Y.**—Bids will be received by the Constructing Quartermaster, U. S. A., until Aug. 16, for the installation of a new pump in the pumping plant at this post.

**New York, N. Y.**—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., Aug. 3, for furnishing, delivering and laying water mains and appurtenances and removing existing mains and appurtenances in Lewis and Reid Aves., Boro. Brooklyn.

Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., Aug. 3, for furnishing and delivering c.-i. pipe, special castings and valve box castings.

***Ithaca, N. Y.**—Bids addressed in care of the City Clerk will be received until 4 p. m., Aug. 9, by the Board of Public Works, for the following: (1) Steel stand pipes of 600,000 gallons and 150,000 gallons capacity, respectively. (2) A quantity of cast-iron water pipe approximating 2,000 ft. of 6-in. and 1,200 ft. of 8-in. pipe. (3) Two water meters for pipes of 24-in. and 20-in. diameter, respectively. (4) Two hydraulic turbines of 100 HP. each with governors. (5) Shafting, clutches, and chains, or other transmission apparatus for connecting said hydraulic turbines to three Goulds triplex pumps. In all of the above except (2) the bid must include the cost of the guarantee of the apparatus in operation for one year. In (1) the apparatus must be installed by the bidder, and the bid shall include the cost of complete installation ready for operation. It is preferred that this should be done in the case of (3), (4) and (5), also. Donald McLeod is City Engr.

**Paterson, N. J.**—Thomas Barwick, Consult. Engr., 21 Park Row, New York, is preparing plans for additional water supply at the Paterson City Poor Farm. William T. Fanning, Paterson, is Arch.

**Hooversville, Pa.** — The Borough Council has granted a franchise to the Hooversville Water Co. for the purpose, it is reported, of constructing a plant here, including the building of a reservoir on the Fallen Timber Run. Estimated cost, $25,000.

**Pittsburg, Pa.**—Bids will be received until 10 a. m., Aug. 4, by the City Controller, for the design, construction, delivery and erection of two water tube boilers in one battery, two mechanical stokers, flue and appurtenances, for Ross Pumping Station, Contract No. 5-B, Bureau of Water, Department of Public Works; also for furnishing and laying 30-in. rising main No. 1 and appurtenances for Mission St. Pumping Station, Contract No. 1-L, and laying 20-in. c.-i. hub and spigot water line, West Carson St., Eighth St. system. Joseph G. Armstrong is Dir. Dept. Pub. Wks.

**Dublin, Va.**—The city has engaged G. H. Derrick, Consult. Engr., Pulaski, Va., to make surveys, prepare plans and estimates of cost of constructing waterworks.

**Aiken, S. C.**—Bids will be received by the Commissioners of Public Works until July 31 for laying about 6¼ miles of 14-in. c.-i. water pipe and supplying various materials. Harry Sudlow, of Aiken, is Engr.

**Darien, Ga.**—The city is considering the construction of a water-works system.

**Flowery Branch, Ga.**—The city is having plans prepared by the J. B. McCrary Co., Empire Bldg., Atlanta, Ga., for the construction of a water-works system.

**Maysville, Ga.**—The city is having plans prepared by the J. B. McCrary Co., Empire Bldg., Atlanta, Ga., for the construction of a water system.

**Thomaston, Ga.**—Bids will be received until Aug. 23 by the Mayor and City Council for furnishing material for constructing the water-works system here. This is a postponement from Aug. 1. The J. B. McCrary Co. is Engr., Empire Bldg., Atlanta, Ga.

**Zebulon, Ga.**—The J. B. McCrary Co., Empire Bldg., Atlanta, Ga., is preparing plans for the construction of a water-works system here.

***Americus, Ga.**—The time for receiving bids for the construction of a reinforced concrete reservoir 60 ft. in diameter, has been extended to Aug. 1. Bids were to have been opened by the Mayor and City Council on July 17.

**Friar Point, Miss.**—Bids will be received until noon, July 2?, by the town, for furnishing all materials and boring an artesian well. Specifications may be obtained either from J. A. Robinson, City Clk., or from F. G. Proutt, Consult. Engr., 374 Randolph Bldg., Memphis, Tenn.

**+Winnfield, La.**—The contract for sinking a deep well has been awarded by the town to LAYNE & BOWLER, of Houston, Tex. The well is to have a capacity of 200,000 gallons per 24 hrs.

**+*Frankfort, Ky.**—The contract for laying a line of water main from Stiltz Lane and Workhouse Road to Lakeland, has been awarded by the Kentucky State Board of Control for Charitable Institutions to the CENTRAL CONSTRUCTION CO., of Lexington, Ky.

**Madisonville, Ky.**—The City Council on July 12 voted to establish a municipal water-works system.

**Sturgis, Ky.**—The city is considering the construction of water-works. Estimated cost, $15,000.

**Cincinnati, Ohio.**—The Water Department has been authorized to spend $80,000 for changing the Price Hill water tanks to a new location on Fergus Road, and enlarging them. Water mains will also be laid to Madisonville at a cost of about $23,000. F. H. Shipley is City Engr.

**Nottingham, Ohio.**—Bids will be received by J. C. Steinicke, Village Clk., until noon, Aug. 4, for the construction of water mains in the following streets: Kirkwood St., from Lamb Ave. to Cross St.; South Depot St., from Dille Road to Union St.; Cross St., from Poplar St. to Kirkwood St; Stevens Ave., from Cross St. to Dille Road; North Depot St., from Dille Road to West End; Leonard Ave., from Sackett Ave. to Oilve St., in accordance with the form of contract, plans and specifications on file in the office of the Clerk, and at the office of J. B. Davis & Son, Engrs., 207 The Arcade, Cleveland, Ohio.

**East Liverpool, Ohio.**—The city has employed the firm of Chester & Fleming, Engrs., Union Bank Bldg., Pittsburg, Pa., to prepare plans and specifications for the installation of a well supply for the city. It is probable that 15 or 20 12-in. wells 30 ft. deep will be drilled along the river front at the upper end of the city.

**+New Carlisle, Ohio.**—The Town Council has awarded the contract for furnishing the water pipe for the water-works plant to the U. S. CAST IRON PIPE & IRON FOUNDRY CO., of Cancinnati, Ohio, at about $7,000. The contract includes 32 tons of 8-in., 51 tons of 6-in., and 163 tons of 4-in. pipe. The BOURBON COPPER & BRASS CO., of Cincinnati, has the contract for hydrants and valves, and the MILWAUKEE BOILER CO. for two reserve water tanks.

**Tiffin, Ohio.**—The City Council has decided to employ an expert to investigate the feasibility of extending the water supply

**Cincinnati, Ohio.** — Bids will be received at the office of the Director of Public Service, City Hall, until noon, Aug. 4, for laying c.-i. pipe, special castings and valves and other miscellaneous work in connection therewith for the distribution system of Cincinnati, in Edwards Road, Grandin Road, Delta Ave., Columbian Road and Deerfield Road. Plans, specifications and blank proposals can be obtained in the office of the General Superintendent of the Water Works Department. John J. Wenner is Clk.

***Oak Harbor, Ohio.**—Bids will be received until noon, Aug. 7, for the construction of a water-works system. Estimated cost, $30,000. Specifications will be mailed at request. Louis L. Christensen is Clk. Bd. Pub. Affairs, Oak Harbor.

**Mitchell, Ind.**—James S. Goodrich, of Winchester, Ind., has ordered plans for the installation of a modern waterworks system here in connection with the electric light plant he has just purchased. Bids will be asked soon.

**Baraga, Mich.**—The village is considering the installation of a municipal water-works and electric lighting system. Estimated cost, $35,000.

**Benton Harbor, Mich.**—The Board of Public Works has decided to spend about $50,000 for water-works improvements. George W. Sturtevant has been retained to prepare plans for converting the temporary station, located in the marsh, into a permanent pumping plant.

**Ionia, Mich.**—The City Council has decided to spend $5,000 of the $50,000 for bettering the water-works plant.

**+Saginaw, Mich.**—The contract for furnishing and installing two compound duplex direct-acting pumps in the West Side station has been award-

ed to FAIRBANKS, MORSE & CO., 481 Wabash Ave., Chicago, Ill., at $7,000. Noted on July 20.

**Hamilton, Ill.**—The citizens on July 11 voted to install a system of water-works. Estimated cost, $20,000.

**Westfield, Ill.**—Bids will be received until July 31 by the town for the construction of water-works, including the erection of a 60,000-gallon tank and tower, one pump, 4, 6 and 8-in. pipe and specials. W. R. Paige is Engr., Terre Haute, Ind.

**+Chatsworth, Ill.**—The contract has been awarded to J. L. PICKENS, of Watseka, Ill., by the village for water main extensions and 13 hydrants, at $5,300.

**+Flora, Ill.**—The H. H. HALL CONSTRUCTION CO., of East St. Louis, Ill., has been awarded the contract for the construction of a water-works system by the village, at $44,012. J. S. Spiker is Engr., Vincennes, Ind.

**Highland Park, Ill.**—Bids will be received by John Oliver, Pres. Bd. Local Improvements, until 7.30 p. m., Aug. 4, for the construction of iron lateral main water supply pipes in Chicago and Judson Aves.

**Lake Bluff, Ill.**—Bids will be received by the Village Council until 7.30 p. m., July 27, for the construction of a steel water tank and tower, alternate bids to be received for flat bottom tank and tower, and for the construction of a pneumatic water system. J. B. Rohn & Son are Archs., 138 North La Salle St., Chicago, Ill.

**Amery, Wis.**—The Village Board is considering the installation of an auxiliary pumping plant for the water-works system.

**+Mellen, Wis.**—The Peoples' Water, Light & Power Co. has awarded a contract for 26 hydrants to the HOUSELLAER VALVE CO., of Troy, N. Y., and for c.-i. pipe to the U. S. CAST IRON PIPE & FOUNDRY CO., Rookery Bldg., Chicago, Ill. W. G. Kirchoeffer, Engr., Madison, Wis., is preparing plans for the construction of the dam and reservoir.

**Belle Plaine, Iowa.**—The citizens on July 10 voted to issue $15,000 of bonds for water-works and sewers.

**Alice** (Hibbing post-office), **Minn.**—Bids will be received until Aug. 2 by Oscar Widstrand, Village Clk., for digging a well and trenches for water and sewer mains, laying water and sewer mains, and for furnishing water and sewer pipes and a steel water tank. A. E. Dyer, of Hibbings, is Engr.

**+Eveleth, Minn.**—The contract for 36 tons of 7-in. c.-i. pipe, specials and three 7-in. valve boxes has been awarded to JAMES B. CLOW & SONS, of Minneapolis, Minn., at $27.90 per ton for pipe; 2¾ cts. per lb. for specials, and $4.20 each for valve boxes.

**+Mankato, Minn.**—The contract for installing the East Mankato auxiliary water plant, including a 50,000-gallon steel tank, 110-ft. steel tower, pipe lines, pump house and pump and motor has been awarded to J. G. ROBERTSON, of St. Paul, Minn., at $6,850.

**Minneapolis, Minn.**—H. N. Knott, City Clk., will receive bids until 7.30 p. m., July 28, for furnishing patent sleeves and valves of various sizes and for furnishing 6,500 ft. of 60-in. c.-i. water pipe.

**Burlington, Kan.**—Bids will be received until Aug. 11 by Della Hall, City Clk., for furnishing the materials for and constructing water-works extensions. W. B. Whistler is City Engr.

**Canton, Kan.**—The proposed water-works and electric light plant has been estimated to cost about $30,000. T. N. Frantz is City Engr.

**Wichita, Kan.**—The J. S. Worley Co., Reliance Bldg., Kansas City, Mo., has been engaged to prepare plans and specifications for the construction of water-works here.

**Anselmo, Neb.**—E. E. Philpott, Village Clk., will receive bids until 8 p. m., Aug. 8, for the construction of a water-works system complete. The Alamo Engineering & Supply Co., are Engrs., Omaha, Neb.

**Bridgeport, Neb.**—The Village Board has received the following bids for the installation of a water system: Inter-Mountain Bridge & Construction Co., Denver, Colo., $14,434 complete; Des Moines Bridge & Iron Co., Des Moines, Iowa, $16,480 complete; Katz-Craig Construction Co., Chicago, Ill., $17,336 complete; Cook Construction Co., Omaha, Neb., $17,460 complete.

**+Grand Island, Neb.**—The contract for extending the water mains here has been awarded to KELLY & CO.

**Malino, Neb.**—Bids will be received until Aug. 10 by the village for the construction of new water-works, including deep well and tower and tank. Estimated cost, $7,300. Bruce & Standeven are Engrs., Bee Bldg., Omaha, Neb.

**Ogallala, Neb.**—Bids will be received by the village until 9 a. m., Aug. 11, for the construction of a water-works system. Estimated cost, $19,000. Bruce & Standeven are Engrs., Bee Bldg., Omaha, Neb.

**Upland, Neb.**—The citizens on July 6 voted to issue bonds for the construction of a water-works plant for protection against fire.

**Sioux Falls, S. Dak.**—We are officially advised that al bids were rejected on July 18 by the city for a concrete well and motor house. The bids follow: J. W. Turner, Des Moines, Iowa, $13,750; Fraser & Danforth, Rochester, Minn., $11,850; Jones & Roderick, Sioux Falls, $12,400; Fanebust Construction Co., Sioux Falls, $12,375. Lewis Larson is City Audr.

**Winner, S. Dak.**—Plans are being prepared for the construction of a municipal water-works system here.

**Bottineau, N. Dak.**—D. R. Carlson, City Audr., will receive bids until 8 p. m., July 31, for the construction of a shallow well with wood, brick or concrete curbing.

**Cabool, Mo.**—We are officially advised that contracts will be awarded by the city about Aug. 7 for the construction of new water-works.

**Greenfield, Mo.**—The citizens voted on July 11 to issue bonds for the construction of water-works, the supply to be obtained from deep wells.

**+Milan, Mo.**—Bids were received as follows on July 8 by the City Council for the construction of water-works: Des Moines Iowa Bridge Co., Des Moines, Iowa, $25,212; F. L. Wilcox, St. Louis, Mo., $25,131; Howard H. Hall, East St. Louis, Ill., $24,355; Fred M. Clark, Savannah, Mo., $23,687; MEYERS CONSTRUCTION CO., St. Louis, Mo., $21,781 (awarded contract).

**Rockport, Mo.**—Bids will be received until July 31 by E. G. Frazier, of Rock Port, for the construction of a flume or intake to receive water from the Nishnabotna River at a point 3½ miles southeast of Hamburg, Iowa. Construction is to be of concrete and steel, together with gates and other appliances.

**St. Charles, Mo.**—Bids will be received until July 29 by Carr Edwards, City Engr., for furnishing and laying 5,000 ft. of 12-in. and 631 ft. of 6-in. c.-i. pipe and constructing two reinforced concrete storage reservoirs, each 85 × 70 × 26 ft.

**St. Louis, Mo.**—We are officially advised that Edward Flood & Co., Consult. Engrs., Fullerton Bldg., St. Louis, Mo., are preparing plans for a 5,000,000-gallon reservoir and coagulation plant for the water-works system of the Anheuser-Busch Brewing Association, St. Louis. Construction will be of reinforced concrete.

**Fort Smith, Ark.**—The Board of Water Commissioners have decided to make extensions to the water mains in the sections of the city as follows: North Sixth St., North Seventh St., North Ninth St., North Eleventh St., South 20th St., South 16th St., Greenwood Ave., Lecta Ave., North 21st St., Bluff Ave., and South T St.

**Bonham, Tex.**—The city has issued bonds for $30,000 for improvements to the water-works system.

**Chillicothe, Tex.**—We are officially advised that the O'Neil Engineering Co., of Dallas, Tex., has been engaged by the city to prepare plans for the construction of new water-works. Estimated cost, $15,000.

**Corpus Christi, Tex.**—Bids will be received by John J. Uehlinger, Water Comr., until Aug. 4, for furnishing about 249 tons of 12, 6 and 4-in. c.-i. water pipe.

**Fort Worth, Tex.**—Bids will be received until Sept. 5 by the city for the construction of a dam containing about 300,000 cu. yds. of earth and 60,000 cu. yds. of masonry, and for a concrete pipe line about 6½ miles long.

**+Sherman, Tex.**—We are officially advised that contracts have been awarded by the city as follows: Engines, to DEISEL ENGINE CO., and DE LA VERGNE ENGINE CO.; pumps, to GOULD MFG. CO.; compressor, to the INGERSOLL-RAND CO. Estimated total cost, $25,000.

**Lubbock, Tex.**—The city will receive bids until Aug. 14 for the construction of a water-works system of 30,000 gallons capacity; large pump, gasoline power; concrete ground reservoir; elevated steel tank and 100-ft. steel tower. L. W. Dalton, of Dallas, Tex., is Engr.

**Cuero, Tex.**—The City Council contemplates having erected a second steel standpipe for reserve water for fire protection.

**+Dallas, Tex.**—The contract has been awarded to the MEMPHIS STEEL CO. for the erection of a large steel standpipe at the White Rock reservoir for the municipal water-works plant. The standpipe will have a capacity of 163,000 gallons.

**Mission, Tex.**—The Mission Land Improvement Co. has promoted the construction here of a system of water-works and the installation of an ice and electric light plant. For the water-works system a 50,000-gallon reservoir will be constructed and a 50,000 gallon steel standpipe erected. A pumping plant will also be installed.

**Wellston, Okla.**—The city has voted the issuance of $20,000 of water-works bonds.

**Florence, Colo.**—The Directors of Hardscrabble Irrigation District, it is reported, have acepted the final estimates of cost of the proposed irrigation project and the permanent survey, as prepared by J. L. Hershey, Engr. Estimated cost, about $900,000.

**Provo, Utah.**—Bids will be received until 2 p. m., Aug. 7, by the U. S. Reclamation Service, Provo, for the construction of about five miles of canal, located about 15 miles northeast of Thistle. The work involves the excavation and placing of approximately 145,000 cu. yds. of material. For particulars address the U. S. Reclamation Service, Washington, D. C., or Provo. Samuel Adams is Acting Secy.

**Salt Lake City, Utah.**—Bids will be received until 10 a. m., Aug. 2, by the Board of Land Commissioners, Salt Lake City, W. J. Lynch, Secy., for furnishing the materials and sinking an artesian well in Iron County.

**Tucson, Ariz.**—The City Engineer will prepare plans for improvements to the water-works system.

**Nogales, Ariz.**—The taxpayers are considering the installation of a municipal water-works and sewer system. Estimated cost, water-works, $100,000; sewer system, $60,000.

**Tacoma, Wash.**—The Municipal Commission has approved proposed changes in the plans for the storage reservoir of the Green River Water System at McMillan. It is estimated that the changes will save the city about $20,000. Benjamin J. Weeks is Comr. Light and Water.

**Portland, Ore.**—The city is considering the installation of water meters throughout the city. Estimated cost, $300,000. D. D. Clarke is Engr. Water Board.

**+Albany, Ore.**—We are officially advised that the contract for fittings and apparatus for the proposed filtration plant here has been awarded to the CONTINENTAL JEWELL FILTRATION CO. The concrete work will be done by force account. H. M. Byllesby & Co. are Engrs., 206 South La Salle St., Chicago, Ill.

**Portland, Ore.**—Bids will be received by the Water Board until 4 p. m., Aug. 1, for furnishing and delivering at Portland, the following quantities of c.-i. water pipe and special castings: 1,025 lengths of 12-in., estimated weight, 497 tons; 10,225 lengths of 8-in., 2,940 tons; 855 lengths of 6-in., 163 tons; total, 3,000 tons; special castings for c.-i. pipe, 400,000 lbs. Bidders are to state the price of pipe per ton of 2,000 lbs. and price of special castings per lb., all delivered f.o.b. cars Portland, and must also state the date when delivery of same will be completed.

**Exeter, Cal.**—Sloan & Robson, Nevada Bank Bldg., San Francisco, Cal., have been engaged by the Board of City Trustees to prepare plans, specifications and estimates of cost of the construction of a municipal water-works system.

**Longbeach, Cal.**—R. F. Gill has been retained by the Water Commission to prepare plans for the extension of the water system to the industrial district and the municipal docks. All pipe to be c.-i. pipe.

**Oxnard, Cal.**—Laubacher Bros. are making arrangements to sink a 14-in. artesian well and will install several miles of cement pipe for irrigation purposes.

**Willits, Cal.**—The Board of Trustees is considering the instalaltion of a municipal water-works system.

## SEWERS.

(**Denotes that this work is advertised in Engineering News.*)

**Boston, Mass.**—Bids will be received by the Public Works Department, until July 28, for sewerage works in Watson St., Roxbury. L. K. Rourke is Comr. Pub. Wks.

**Boston, Mass.**—Bids will be received until Aug. 1 by the Public Works Department for sewerage works in Market St. and Perthshire Rd., Brighton. L. K. Rourke is Comr. Pub. Wks.

**+Boston, Mass.**—The contract for constructing sewerage works in Johnston Rd., has been awarded to ANTONY CEFALO, at $5,306. Other bids were: J. H. Ferguson, $5,485; Murphy & Dolan, $5,564; M. De Sisto & Co., $5,609; Geo. J. Regan, $5,857; Peter W. Hill, $5,974; Wm. J. Barry, $6,101; E. De Christofore, $6,255; D. E. Lynch, $6,466; John McCourt & Co., $6,649.

***Fitchburg, Mass.**—Bids will be received by the Board of Sewage Disposal Commissioners, 352 Main St., Fitchburg, until 3 p. m., Aug. 15, for constructing Section 2 of the main intercepting sewer covering the following work: 3,590 lin. ft. of earth excavation and refilling in trench for 45-in. and 48-in. concrete sewer, 1,020 cu. yds. of rock excavation in trench, 600 cu. yds. earth excavation below sewer grade, 750 cu. yds. gravel fill below sewer grade, 4,550 cu. yds. earth fill in embankment, 84 sq. yds. brick masonry in manholes, 1,560 cu. yds. concrete masonry in trench, 54,000 lbs. deformed steel bars for reinforcing concrete, 60,000 ft. B. M. lumber for sheeting, shoring, etc.; also for building Section 2A of the main intercepting sewer covering the following work: 1,300 lin. ft. of earth excavation and refilling in trench for 48-in. concrete sewer; 1,570 lin. ft. of earth and rock tunnel for 48-in. sewer, 850 cu. yds. of rock excavation in trench; 70 sq. yds. brick masonry in sewer invert, 10 cu. yds. brick masonry in manholes, 520 cu. yds. of concrete masonry in trench, 650 cu. yds. of concrete masonry in tunnel, 4,000 lbs. of steel bars for reinforcing concrete, 70,000 ft. B. M. lumber for sheeting, shoring, etc. David A. Hartwell is Ch. Engr.

**+*Pittsfield, Mass.**—We are officially advised that the contract for 7,500 cu. yds. of earth excavation, 16,000 lin. ft. of piles, 200 cu. yds. masonry, 1,500 lin. ft. 8 and 12-in. vitrified pipe and 4,600 lin. ft. 16, 18 and 24-in. c. i. pipe was awarded on July 19, to D. A. DOREY, 7 Charles St., Natuk, Mass., at $23,819; the other bidders were: Pierson Engineering and Construction Co., Bristol, Conn., $27,718; A. W. Bryne Co., Inc., Hartford, Conn., $28,407; John J. Falvey, Somerville, Mass., $30,772; Henry Spinach Contracting Co., Waterbury, Conn., $41,384. A. B. Farnham is Ch. Engr., Bd. Pub. Wks. Noted July 13.

**+Ansonia, Conn.**—The Board of Sewer Commissioners has awarded the contract for "Section F" of the sewer system, to PASQUALE MADORNO, Shelton, Conn., at $6,832. The other bids were: Edward Tracy, Derby, Conn., $8,198; O'Neill Bros., Hartford, Conn., $9,175; A. Conti & Co., Hartford, Conn., $9,390; Mascetti & Holley, Torrington, Conn., $12,441; B. D. Pierce, Jr. & Co., Bridgeport, Conn., $12,773; Brault & Davidson, Ansonia, Conn., $13,619; Edward McManus, Waterbury, Conn., $20,176. The estimated quantities were: 8,934 ft. of 8-in., 800 ft. of 10-in., 1,664 ft. of 12-in. vitrified pipe sewer, and 54 manholes. V. B. Clark is City Engr.

**+New Haven, Conn.**—It is reported that THOMAS F. MAHER has been awarded the contract for changes to the sewer system in Union Ave., at his bid of $16,066.

**New Haven, Conn.**—Bids will be received by C. W. Kelly, City Engr., until July 28, for constructing sewers in Maple and Hobart Sts.

**Binghamton, N. Y.**—Bids will be received by the Board of Contract and Supply until Aug. 2, for constructing a vitrified pipe sewer in Williams St. W. S. Murray is Clk. of Bd.

**New York, N. Y.**—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., July 31, for constructing and extending sewers in various streets.

**New York, N. Y.**—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., Aug. 2, for constructing various sewers. Estimated cost, $6,500.

***Matteawan, N. Y.**—See item under Water Supply—Irrigation.

**Paterson, N. J.**—Mayor Andrew F. McBride, of Paterson, has signed the contract binding Paterson to join with 16 other cities in the construction of a trunk sewer, estimated at $13,250,000.

**Riverton, N. J.**—Bids will be received by Robert Biddle, Chn. Sewer Comn. until July 27, for constructing sewers in Highway, Midway, Seventh, Eighth and Main Sts., in all about 4,500 ft., with manholes, etc. Henry S. Haines, Temple Bldg., Camden, N. J., is Boro. Engr.

**Salem, N. J.**—We are officially advised that Clyde Potts, 30 Church St., New York, has been retained by the city of Salem to design a sewerage system. I. C. Smashey is Mayor.

**Summit, N. J.**—Bids will be received by J. E. Rowe, City Clk., until Aug. 1, for constructing Sections 1 and 2, of vitrified pipe sewers. John S. Stiger is City Engr.

**Crafton, Pa.**—Bids will be received by the McBride Surveying & Engineering Co., Ltd., Boro. Engrs., Fitzsimmons Bldg., Pittsburg, until Aug. 1, for laying sanitary sewers in portions of Ridge and Crafton Aves., and several other streets, requiring in all 6,880 ft. of 8 to 18-in. sewer, 17 manholes, 2 flush tanks, and 4 lamp holes.

**West View, Pa.**—Bids will be received by the Borough Council until July 29, for constructing 1,900 ft. of 18-in. and 240 ft. of 8-in. sewer, in Park Ave. H. L. Donaldson is Boro. Secy.

**+Baltimore, Md.**—The contract for the construction of screens and fans for an outfall sewer had been awarded to EDW. S. ROBERTS, Harrison Bldg., Philadelphia, Pa.

**Clinton, S. C.**—Bids will be received by the Sewer Comm., W. H. Millan, Chn., until Aug. 21, for the construction of a system of sanitary sewers to include about nine miles of 8 to 12-in. sewer and two settling tanks. J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., are Engrs.

**Thomaston, Ga.**—Bids will be received until Aug. 23, for constructing a sewer system. The J. B. McCrary Co., Inc., Atlanta, Ga., are Engrs.

**New Orleans, La.**—Bids will be received until noon, Sept. 11, for constructing the Napoleon Ave. system of drainage canals and pipe lines. The main items of work will comprise approximately 295,000 cu. yds. of excavation, 53,000 cu. yds. of reinforced-concrete and 75,000 lin. ft. of 36-in. to 6-in. terra cotta pipe lines. Leon Manberret is City Clk.

***Louisville, Ky.**—Bids will be received by the Sewerage Commission, P. L. Atherton, Chn., until Aug. 4 for constructing Section D, Middle Fork Sewer, Contract 82, and the 34th St. Sewer, Contract 83. J. B. F. Breed is Ch. Engr.

**Nottingham, Ohio.**—Bids will be received by J. C. Steinicke, Vil. Clk., until noon, Aug. 4, for constructing a sanitary sewer in Forest Ave., and other streets. J. B. Davis & Son, The Arcade, Cleveland, are Engrs.

**West Lafayette, Ohio.**—Bids for constructing a storm sewer system have been received as follows: George J. Bock & Son, Coshocton, $17,513; J. B. Scheetz Co., Pittsburg, Pa., $17,533; Henderson Bros., Coshocton, $17,433; Cantwell Construction Co., Parkersburg, W. Va., $18,857; Trainer & Scanlon, Huntington, W. Va., $15,583; W. M.

Brode & Co., Newcomerstown, Ohio, $16,795; Houston & Henderson, Logan, Ohio, $15,621; Van Meter Construction Co., Steubenville, Ohio, $16,431; John Hall, Coshocton, $16,052; Paul & Kershner, Dayton, Ohio, $20,654; John McCleary, West Lafayette, $558, on open ditch excavation.

**Rockport, Ind.**—The City Council has passed an improvement ordinance providing for the construction of a combined storm and sanitary sewer system. Estimated cost, $35,000.

**Marquette, Mich.**—We are officially advised that Thomas R. Hasley, Menominee, Mich., has been engaged as Consulting Engineer, and has made plans for sewer extension. Charles Cummings is Civil Engr. and Surveyor. Noted July 13.

**Champaign, Ill.**—Plans are being prepared for a storm sewer system, to cost $230,000. Charles Cottingham, Danville, is Engr.

**Florence, Wis.**—Bids will be received until Aug. 9, by O. G. Johnson, Town Clk., for laying 1,098 ft. of 10-in. and 5,239 ft. of 12-in. and 2,928 ft. of 8-in. pipe sewers, depth 3 to 12 ft. W. G. Kirchoffer, Madison, Wis., Consult. Engr.

**Belle Plaine, Iowa.**—Bonds for $15,000 have been voted for the construction of sanitary sewer outlets. The city is considering improvements to cost $50,000.

**Pella, Iowa.**—Bids will be received by A. C. Kuyper, City Clk., until Aug. 2 for constructing 15,000 ft. of sewers.

**St. Paul, Minn.**—The Board of Public Works will soon receive bids for the construction of the Thomas and Van Buren St. sewer system to cost $65,000. R. L. Gorman is Clk. of Bd. O. Claussen, is City Engr.

**✚*Madison, S. Dak.**—We are officially advised that the contract for constructing a sewer system has been awarded to MEEKER & DOBSON, Lincoln, Neb., at $28,499. The other bids were: Frazer & Danforth, Rochester, Minn., $33,899; G. S. Redmon, Pipestone, Minn., $32,559; Lytle Construction Co., Sioux City, Iowa, $29,590; Tibey Bros., Dubuque, Iowa, $29,864; R. W. Forrestal, Milwaukee, Wis., $28,905; Inter-Mountain Bridge & Construction Co., Tecumseh, Neb., $30,421; Dunnegan & Briggs, Shenandoah, Iowa, $31,124; Bentz & White, Centerville, S. Dak., $36,017; L. W. Schruth, Fargo, N. Dak., $47,770; Wm. Welsh, Bridgewater, S. Dak., $43,088; Tanner Bros., Webster, S. Dak., $37,110; Roberts & Few, Brookings, S. Dak., $36,037; A. L. Jones, Sioux Falls, S. Dak., $33,126; Everitt & Hitch, Brainerd, Minn., $35,449; W. E. Rosecrans, Ames, Iowa, $32,360; H. J. Cathroe, Omaha, Neb., $34,993; Cook Construction Co., Des Moines, Iowa, $35,961; E. L. Dimick, Laurel, Neb., $31,431; R. B. Airey, Pierre, S. Dak., $32,392; J. J. Connolly, St. Paul, Minn., $33,083; C. R. McKay, Omaha, Neb., $34,845. The Missouri Valley Engineering Co., Mitchell, S. Dak., are Consult. Engrs.

**Minot, N. Dak.**—Bids will be received by L. P. Thompson, City Audr., until July 31 for the construction of a sewer pumping station, and for grading and improving several streets.

**Las Cruces, N. Mex.**—The City has sold bonds for $75,000 for the construction of a municipal sewer system and water works.

**✚Phoenix, Ariz.**—The contract for constructing a municipal sewer system has been awarded to the AMERICAN LIGHT & WATER CO., 125 Monroe St., Chicago, Ill., at $308,940. The item bids were: 263,450 ft. 8-in. vitrified pipe, 54 cts. per lin. ft.; 9,520 ft. 10-in., 73 cts.; 2,100 ft. 12-in., 86 cts.; 3,620 ft. 14-in., $1.04; 3,445 ft. 16-in., $1.30; 7,320 ft. 18-in., reinforced-concrete pipe, $1.75; 6,770 ft. 22-in., $1.97; 8,500 ft. 24-in., $2.48; 3,710 ft. 27-in., $3.12; 4,780 ft. 30-in., $3.45; 4,000 ft. 36-in., $4.55; flush tanks, $79 each; manholes, $43 each; septic tank, No. 1, $6,270; septic tank No. 2, $14,602. The other bids were: J. C. Huff, Phoenix, $325,149; Hamilton Bros., Cameron, Tex., $326,806; Sutherlin Co., Kansas City, Mo., $319,976; Geo. W. Sturtevant, Chicago, $339,626; for all vitrified pipe; $305,585 for all concrete pipe; $329,887 for combination. Olmstead & Gillelon, Wright and Callender Bldg., Los Angeles, are Engrs.

**San Francisco, Cal.**—Bids will be received by the Board of Public Works until 10 a. m., July 31, for constructing sewers and appurtenances in various streets.

**Winters, Cal.**—Bids will be received by T. H. Brock, City Clk., until Aug. 1, for constructing a sewer system according to the plans of Haviland & Tibbetts, Alaska Commercial Building, San Francisco.

**Fort Erie, Ont.**—We are officially advised that a municipal sewer and septic tank will be constructed at Fort Erie. Witmer & Brown, Chapin Block, Buffalo, N. Y., are Design and Consult. Engrs.

## GARBAGE DISPOSAL.

(*✚Denotes a contract awarded.*)

**✚Huntington, Ind.**—Bids were received July 11, by the city for the construction of a garbage crematory. The contract has been awarded to the McGUIRE INCINERATOR CO., of Hobart, Okla., at $2,500; furnace capacity 5 tons of night soil in 24 hrs., complete with stack. Other bids were: Morse-Boulger Destructor Co., 32 Cortlandt St., New York, $4,750, for furnace of 20-ton capacity, with 80-ft. × 27-in. brick stack, and $4,300 for 75 ft. × 27-in. steel stack; Discon Engineering & Construction Co., Toledo, Ohio, furnace of 15-ton capacity, direct draft, with steel chimney, $4,200; brick chimney, $5,842, concrete chimney $5,970; Lewis & Kitchen, 1200 Michigan Ave., Chicago, Ill., furnace capacity 20 tons, with brick stack 100 ft. × 3 ft., $5,700 and $4,900 with 3/16-in. steel stack 100 ft. × 3 ft.

**Virginia, Minn.**—Bids will be received until Aug. 1 by the City Clerk for furnishing material and constructing a 25-ton incinerator plant.

## STREETS AND ROADS.

(**Denotes that this work is advertised in Engineering News.*)

**Portland, Me.**—Bids will be received by the Commissioner of Public Works until noon, July 31, for constructing 2,400 ft. of road. H. T. Waterhouse is City Clk.

**Concord, N. H.**—Bids will be received by H. C. Hill, State Engr., Highway Dept., until 1 p. m., Aug. 4, for constructing 2¾ miles of gravel road in the town of Campton. Plans and specifications are on file at the office of the engineer.

**Barre, Vt.**—Bids will be received by the City Clerk until Aug. 7 for constructing about 2,800 sq. yds. of granite block paving on concrete foundation, on Main St. L. H. Thurston is Chn. Street Comn.

**Boston, Mass.**—Bids will be received until July 31, by Public Works Department, for laying wood block pavement in Washington St., and for repaving Albany and Bristol Sts. L. K. Rourke is Comr. Pub. Wks.

**✚Boston, Mass.**—The following bids were received on July 18 by the Massachusetts Highway Commission: for constructing highway in Ashby, F. J. MAGUE, Newton, $3,718 (awarded contract); D. H. Damon, Ashby, $3,938; Bush, Moller & Smith, Hartford, Conn., $4,950; for highway in Egremon: C. A. Rossi, Torrington, Conn., $6.513; M. L. Camarco, Lee, $6,731; T. F. Giovannini, Boston, $7,188; F. G. Mague, W. Newton, $7,566; Williams & de Furea, Boston, $9,925. For highway in Hatfield: Bush, Moller & Smith, Hartford, Conn., $6,495; G. J. Cellitti, Springfield, $7,294; D. T. Perry, Attleboro, $7,295; H. L. Thomas, Middleboro, $7,796. For highway in Holliston: Bush, Moller & Smith, Hartford, $5,872; F. J. Mague, West Newton, $6,038; Rowe Construction Co., Brighton, $6,749.

**Haverhill, Mass.**—Press reports state that the city contemplates the expenditure of $30,000 for highway work at Ward Hill. The state will appropriate about $20,000 for this work.

**Naugautuck, Conn.**—Bids will be received by the Board of Warden and Burgess until 8 p. m., Aug. 1, for the construction of 3,100 sq. yds. of brick pavement on concrete base. Plans and specifications care on file with the Borough Engineer and the Borough Clerk.

**Hartford, Conn.**—Plans for proposed state road work have been received by J. H. MacDonald, State Highway Comr., as follows: From Engr. S. H. McKenzie, 800 lin. ft. on Meriden Ave. in the town of Southington; from Div. Engr. C. A. Campbell, 2,600 lin. ft. on Main St., in the town of Old Lyme; 11,300 lin. ft. on the New London Turnpike in the town of Stonington. From Div. Engr., G. E. Smith, 9,100 lin. ft. on the River Road in the town of Seymour; also 11,200 lin. ft. on South Main St. in the town of Seymour; 4,000 lin. ft. in the town of Prospect. From Engr. Alexander Cahn, 2,400 lin. ft. on the Clintonville Road, in the town of North Haven. From Engrs. Alderson & Brainard, 12,200 lin. ft. on the Barkhansted Road, in the town of Hartland. From Div. Engr. E. C. Welden, 2,800 lin. ft. on the Willimantic Turnpike, in the town of Bolton; 2,800 lin. ft. on the Hartford Road in the town of Vernon; 13,200 lin. ft. on the Ellington-Rockville Road, in the town of Somers. From Div. Engr. W. H. Knight, 2,100 lin. ft. on the Amenia Road and 14,600 lin. ft. on the Lakeville Road in the town of Sharon; 8,550 lin. ft. on the River Road in the town of Canaan. From Engr. S. H. McKenzie, 15,709 lin. ft. on the Waterbury Turnpike in the town of Southington. From Engrs. Hall & Bacon, 5,500 lin. ft. on the Kensington Road in the town of Berlin, 2,600 lin. ft. in the town of Wethersfield. From Engr. R. G. Pike, Jr, 5,600 lin. ft. on the Colchester Road in the town of East Haddam.

**✚Waterbury, Conn.**—The Board of Public Works have awarded the contract for 7,100 sq. yds. of vitrified brick pavement in Grand and Meadow Sts. to FIELD, BARKER & UNDERWOOD, Philadelphia, Pa., for Mack block at $21,016. Other bidders were Connecticut Hassam Paving Co., Mack block, $21,158; Metropolitan block, $21,229; Clearfield block $21,229; Joseph S. Barbara, Waterbury, Conn., Mack block $22,365, Metropolitan block $21,152, Shawmut block $21,584.

The only bid received for macadamizing North Riverside St. was submitted by Edward McManus, Waterbury, Conn., at $12,035. The bid was rejected and it was voted to call for new bids for the work. Noted July 13.

***Larchmont, N. Y.**—Bids wil be received by the Board of Trustees until 8:30 p. m., Aug. 7, for constructing concrete sidewalks. Specifications may be be obtained from L. E. VanEtten, Engr., 12 & 14 Lawton St., New Rochelle, N. Y., Eugene D. Wakeman is Vil. Clk.

**New York, N. Y.**—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon, Aug. 1, for furnishing and delivering 75,000 gal. of nishing and delivering 75,000 gallons of base.

**New York, N. Y.**—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., July 31, for regulating, grading, curbing, repaving, etc., various streets.

**New York, N. Y.**—Bids will be received by Charles B. Stover, Pres. Park Bd., Dept. of Parks, until 3 p. m., Aug. 3, for constructing cinder and gravel walks and dry rubble sea wall, and furnishing and erecting pipe rail fence, in Rainey Park, Long Island City.

**Schenectady, N. Y.**—Plans are being prepared by the City Engineer for widening Dock St. J. Leland Fitzgerald is City Engr.

**✚Utica, N. Y.**—The contract for paving Oneida St. from Oneida Square to James St., has been awarded to WARREN BROS. CO., 59 Temple Pl., Boston, Mass., at $11,820.

Bids were received for paving Neilson St. from the West Shore R. R. to James St., as follows: Warren Bros. Co., bitulithic with natural stone curbs and walks, $10,697; with artificial stone curbs and walks, $9,776; asphaltic concrete, natural stone curbs and walks, $9,320; artificial, $8,398. Harry W. Roberts & Co., asphalt with natural stone curb and walks, $9,525; artificial, $8.588; brick with natural stone curb and walks, $10,673; artificial, $9,736.

**Newark, N. J.**—Bids will be received by the Board of Street and Water Commissioners until 3.15 p. m., July 27, for grading, curbing and flagging Hobson St., from Shaw to Hawthorne Ave. The work will consist of 800 cu. yds. excavation, 3,040 lin. ft. of 20 × 4 in. curb, set in concrete; 915 lin. ft. of old curb, four-cut and reset in concrete; 13,850 sq. ft. of flagging, 4 ft. wide; 50 sq. ft. of Belgian bridging. Morris R. Sherrerd is Ch. Engr.

**West New York, N. J.**—Bids will be received by the Town Council until Aug. 1, for constructing 5,000 sq. yds. of asphalt block pavement. Carl Griesbach is Engr.

**✚Dunmore, Pa.** — The contract for paving Chestnut St. has been awarded to the R. C. RUTHVEN CO., at $20,000.

**New Castle, Pa.** — Bids will be received by H. M. Marquis, City Clk., until 8 p. m., July 31, for repaving Long Ave., from Mill to Hamilton St., Washington St., from Croton Ave. to Kurtz St., and others.

**Philadelphia, Pa.**—Plans and specifications are being drawn for the reconstruction of from 15 to 20 of the 45 miles of roads in Fairmount Park, and contracts for this work will soon be awarded.

**✚Washington, Pa.**—Contracts for the construction of 10 sections of improved highways in Washington County, totaling 22 miles, have been awarded by the County Controller and the County Commissioners. The total cost of the 10 roads will be $348,259, and of this amount $99,611 will be spent for paving brick. There were 85 bids received, the successful bidders being as follows: E. J. ERBECK, Homestead; the COLLINS-GORDON CO., Pittsburg; SAMUEL GAMBLE, Carnegie; HASTINGS & PIPER, Charleroi; REED & LIGGETT, Washington, and WILLIAM PICKETT & CO., Washington. The cost of construction without brick will average $11,300 a mile, and with brick the cost averages $15,811 a mile.

**Washington, Pa.** — Bids will be received by John H. Moffit, County Comptroller, until Aug. 7, for resurfacing with tarvia, warrenite, amiesite, or other asphaltum materials, two roads, 1 and 1½ miles long, respectively. Chaney & Armstrong are County Engrs.

**✚Wilkes-Barre, Pa.** — The County Commissioners have awarded a contract for constructing the Trucksville Road to HERRICK & CO. at $41,531. The road is to be constructed of alcolite and crushed stone.

**Annapolis, Md.**—Bids will be received by the Board of Commissioners for Anne Arundel County until 11 a. m., Aug. 1, for grading and surfacing with macadam Patapsco Ave. in the Town of Brooklyn, Md., from First St. to Pennington Ave., a distance of about a mile, in accordance with plans and specifications on file in the office of the County Commissioners and in the office of the State Roads Commission, Baltimore. E. T. Hayman is Road Engr., and S. O. Tilghman, Clk.

**✚Baltimore, Md.** — The State Roads Commission has awarded a contract to GEO. M. FRECH, Somerville, N. J., at $60,651, for constructing 5.29 miles of road in Carroll County, and to F. MULLAN, Old York Road and Dumbarton Ave., Baltimore, Md., for draining, bridging and grading 4.26 miles of road from Huntin Creek to Prince Frederick, in Calvert County.

**Washington, D. C.**—Bids were received as follows on July 25 by the Commissioners of the District of Columbia for furnishing 70,0[illegible] gallons of road-binding material f[illegible] on the roads of the District: (a) [illegible] tank cars (b) in barrels: Barber As[illegible]lt Paving Co., Philadelphia, (a) 12.2[illegible] (b) 13¼ cts.; Hedley Good Roads [illegible] Real Estate Trust Co., Philadelp[illegible] (a) 11.5 cts.; (b) 13 cts.; Standar[illegible] Asphalt & Rubber Co., Chicago, [illegible] 9.35 cts.; Texas Co., New York, [illegible] 8.07 cts., (b) 11 cts.; Barrett Mfg. [illegible] Philadelphia, (a) 8 cts., (b) 9.4 [illegible] United States Gas Improvement [illegible] Philadelphia, (a) 6.8 cts., (b) [illegible] cts., 7.8 cts. in drums; Good Roa[illegible] Improvement Co., Cincinnati, Ohio [illegible] 8 cts., (b) 10 cts.; Union Oil Co. [illegible] California, New York, (b) 11 cts.; S[illegible]ndard Oil Co., New York, (a) 6.25 ct[illegible] (b) 8.45 cts.; alternate, 8.45 cts., [illegible] cts. in drums; Byerley & Son, Clev[illegible]and, Ohio, (a) 9.5 cts., (b) 9.5 cts.; A[illegible]rican Asphaltum & Rubber Co., Chi[illegible]go, (a) 11 cts.

**Norfolk, Va.**—The Commo[illegible] Council is considering a plan to build [illegible] boulevard through Villa Heights, conn[illegible]ting with the new county boulevar[illegible] to Ocean View. The cost is estimat[illegible] at $11,700, part of which has already [illegible]en appropriated. W. T. Brooke is [illegible] Engr.

**✚Wilmington, N. C.**—we [illegible] officially advised that contracts for p[illegible]ving, grading and curbing Front St. were awarded on July 15, as follows: 16,000 sq. yds. asphalt block paving, to WILLIAM PANNILL, Atlanta, Ga., at $2.59 per sq. yd.; 8,000 sq. yds. vitrified brick paving to the SOUTHERN PAVING & CONSTRUCTION CO., Chattanooga, Tenn., at $2.79 per sq. yd. The other bids received were: Hastings Pavement Co., New York, N. Y., asphalt blocks, $2.65 per sq. yd.; United States Wood Preserving Co., New York, N. Y., wood blocks, $2.59; Rudolph S. Blome Co., Chicago, Ill., granotoid, $1.99; Atlantic Bitulithic Co., Richmond, Va., bitulithic, 4-in. concrete base, $2.12; 5-in. concrete base, $2.23; Georgia Engineering Co., Augusta, Ga., vitrified brick, $2.27.

**Hammond, La.**—Bids will be received by M. C. Wilson, Mayor, until Aug. 10, for constructing approximately 6½ miles of concrete sidewalks.

**Shreveport, La.** — Bids will be received by L. H. Baker, City Secy.-Treas., until July 27, for constructing 50,000 sq. yds. wood block, 20,000 sq. yds. brick, 53,000 sq. yds. sheet asphalt, 60,000 sq. yds. asphaltic concrete, 49,000 sq. yds. bitulithic, and 10,000 sq. yds. concrete, street paving.

**✚*Chattanooga, Tenn.**—Press reports state that the contract for paving various streets with Trindad Bermuda asphalt has been awarded to the WEST CONSTRUCTION CO., Chattanooga, Tenn., at approximately $125,000. Noted on July 20.

**Arcanum, Ohio.** — Bids will be received by C. C. Taylor, Vil. Clk., until Aug. 4, for grading, draining, curbing, constructing sewers and otherwise improving portions of various streets.

**Cambridge, Ohio.** — Bids will be received by the Commissioners of Gurnsey County until Aug. 4, for grading and paving with brick one mile of road in Cambridge Township, after plans and specifications of the State Highway Department. The estimated cost of the work is $13,386. James R. Marker is State Highway Comr.

**Canton, Ohio.**—Bids will be received by the Commissioners of Stark County, until Aug. 4, for grading and paving with brick 2.16 miles of roadway in Plain Township. The cost of the work is estimated at $39,132. James R. Marker is State Highway Comr.

**Chillicothe, Ohio.**—Bids will be received by the Director of Public Service until noon, Aug. 1, for paving and parking Main and High Sts.

**Cincinnati, Ohio.**—Bids will be received by the Commissioners of Hamilton County until noon, Aug. 11, for improving Kugler Mill Road, from Loveland and Madeira Pike to Bloom Road, in Symmes Township. Fred Dreihs is Clk.

**East Liverpool, Ohio.**—Bids will be received by C. V. Beatty, Dir. Pub. Ser., until noon, July 28, for grading Indiana St., from Avondale to Illinois St.

**Grove City, Ohio.**—Bids will be received by Jules Hugonoit, Vil. Clk., until Aug. 9, for macadamazing a portion of Broad St.

**Columbus, Ohio.**—Bids will be received by the Commissioners of Franklin County until noon, Aug. 9, for macadamizing and otherwise improving about ten miles of road. John Scott is Clk.

**✚Delaware, Ohio.**—The County Commissioners have awarded the contract for the improvement of the Taylor's Corner and Olive Green Road to VOGELSANG & WALTZ, at $16,665.

**London, Ohio.**—Bids wil be received by the Commissioners of Madison County until noon, Aug. 15, for grading the hill in Mt. Sterling and widening the levee on the Mt. Sterling and Five Points Pike. J. J. Shaffer is County Audr.

**Mansfield, Ohio.** — Bids will be received by the Trustees of Butler Township until July 28 for improving the Adario and Greenwich Road a distance of about four miles. Material to be either macadam with tar or asphalt binder, or brick with macadam foundation and cement curbing. C. L. Bushey is County Surv.

**✚Marion, Ohio.**—M. W. SHAW AND L. D. UNCAPHER have secured the contract for piking the Cardington Road a distance of four miles, at $17,-000.

**Marietta, Ohio.**—Bids will be received by the Board of Commissioners of Washington County until Aug. 2, for grading and paving with brick 1.57 miles of road in Marietta Township under the supervision of the Ohio State Highway Department. The estimated cost of the work is $16,895. James R. Marker is State Highway Comr.

**McConnelsville, Ohio.** — Bids will be received by the Commissioners of Morgan County until Aug. 3 for grading and macadamizing two miles of road in Morgan Township. The construction is estimated to cost $16,568, and is to be water bound. James R. Marker is State Highway Comr.

**Shiloh, Ohio.**—Bids will be received by the Trustees of Cass Township, D. Cole, Chn., until Aug. 1, for grading and macadamizing or piking Road No. 2, requiring 3,629 cu. yds. excavation and 6,422 sq. yds. macadam; Road No. 4, 4,252 cu. yds. excavation and 57,455 sq. yds. macadam; Road No. 7, 5,488 cu. yds. excavation and 4,592 sq. yds. macadam. T. A. Barnes is Township Clk.

**✚Steubenville, Ohio.**—The contract to pave several streets has been awarded to H. M. BATES, at $15,158.

**Xenia, Ohio.**—Bids will be received by the County Commissioners until Aug. 2, for macadamizing 4-5 of a mile of the Dayton and Xenia Pike in Xenia Township. Walter L. Dean is County Audr., and A. C. Carpenter, Chn. Comrs.

**✚Youngstown, Ohio.**—The contract to pave Myrtle St. has been awarded to KENNEDY BROS., at $39,866.

**Youngstown, Ohio.**—Bids will be received by the Trustees of Beaver Township until Aug. 2, for paving N. Lima and Lewiston Road, a distance of about two miles. Specifications are on file at the office of Hazeltine & Montgomery, 1516 Wilson Ave., Youngstown. H. E. Montzer is Township Clk.

**INDIANA ROAD IMPROVEMENTS.**

Bids will be received as follows for highway improvements in Indiana:

Aug. 7.

Greensburg, by the County Commissioners, until 1 p. m. Frank E. Ryan is County Audr.

Versailles, by the County Commissioners, until 1 p. m. Nicholas Volz is County Audr.

Washington, by the Commissioners of Daviess County, until 2 p. m. Thos. Nugent is County Audr.

Crown Point, by the County Commissioners, until noon. Charles Johnson is County Audr.

Aug. 8.

Spencer, by the Commissioners of Owen County, until 1 p. m. G. W. Edwards is County Audr.

Martinsville, by the Commissioners of Morgan County, until 2 p. m. J. S. Whitaker is County Audr.

Aug. 12.

Frankfort, by the Commissioners of Clinton and Boone Counties, until 2 p. m. Charles T. Cromwell is Audr. Clinton County.

**Grand Rapids, Mich.**—Bids will be received by E. H. Christ, Pres. Bd. Pub. Wks., until July 27, for grading and paving Wealthy Ave.

***Albion, Mich.**—Bids will be received by W. R. Noyles, City Clk., until 5 p. m., Aug. 2, for grading and paving Michigan Ave.

**Wilmette, Ill.**—Bids will be received by I. J. Byran, Secy. Sanitary District of Chicago, 1500-76 West Monroe St., Chicago, until July 27, for the construction of pavements, curbs and drainage work at and in the vicinity of Sheridan Road Bridge over the North Shore Channel of the Sanitary District of Chicago, in the Village of Wilmette.

**Winnetka, Ill.**—We are officially advised that bids for paving with brick Railroad Ave. have been received as follows: John A. McGarry & Co., Security Bldg., Chicago, Ill., $19,455.36; Smith & Brown Co., 128 North LaSalle St., Chicago, Ill., $19,737.40; James Cape & Sons Co., Racine, Wis., $19,848; Western Improvement Co., John Jones & Sons, Racine, Wis., $20,077; W. W. Winslow, Indianapolis, Ind., $20,675. Windes & Marsh are Engrs.

**Racine, Wis.**—Bids will be received by the Board of Public Works until July 29 for grading, curbing, paving and otherwise improving a portion of North Erie St. P. H. Connolly is City Engr.

**✚Rhinelander, Wis.**—We are officially advised that a contract for paving various streets has been awarded to the McGRATH CONSTRUCTION CO., Green Bay, Wis., at $13,625.

**Duluth, Minn.**—The lowest bid received for improving West Fifth St., between 25th and 23d Aves., was submitted by Hugh Steele, at $41,141.

**Ottawa, Kan.**—We are officially advised that all bids received for grading, curbing, guttering and paving Willow St., from Third to Seventh St., and Ash St., from Fifth to Sixth St., have been rejected. The lowest bid received was submitted by McGuire & Stanton, Leavenworth, Kan., at $14,274. New bids will be received until 7.30 p. m., Aug. 2. Claude S. Pugh is City Engr., W. T. Wood, Mayor, and G. E. Srauchon, City Clk.

**Pocatello, Idaho.** — Bids will be received by the City Clerk of Pocatello until noon, Aug. 3, for the construction of sidewalks, according to the plans of the City Engineer.

**Salt Lake City, Utah.**—Bids will be received by the Board of Public Works until July 28, for constructing cement sidewalks in Sidewalk Extensions Nos. 150 and 132, and grading, curbing and guttering in Curb and Gutter Extension No. 18. H. C. McMillan is Chn. Bd.

**North Yakima, Wash.**—Bids will be received by the County Comrs. until 2 p. m., Aug. 4, for constructing two miles of highway. W. B. Newcomb is County Audr.

**Los Angeles, Cal.**—Bids will be received until Aug. 7, by the County Board of Supervisors for the improvement of portions of the Whittier Road.

**Napa, Cal.**—Bids will be received by the Clerk of the Board of Supervisors until 10 a. m., Aug. 13, for building a macadamized roadway 16 ft. wide along a portion of the main county road leading through Brown's Valley to the Redwoods, 1,770 ft., and for building a macadamized road 12 ft. wide along the entire length of Section B, in Brown's Valley Road division, a distance of 2.32 miles. Plans and specifications on file with N. W. Collins, Clk.

**San Mateo, Cal.**—The Board of Trustees have voted to improve the roads in San Mateo Park with oil macadam from plans drawn by D. Bromfield, City Engr. The estimated cost of the work is $100,000.

**✚Santa Barbara, Cal.**—The City Council has awarded a contract to the SANTA BARBARA PAVING & GRADING CO. for improving Anapamu, Figuerva, Santa Barbara, and Anacapa Sts., at $20,921.

**Toronto, Ont.**—Bids will be received by G. R. Geary, Mayor, and Chn. Bd. of Control, until noon, Aug. 1, for paving various streets with asphalt, bitulithic and concrete, and for constructing concrete walks.

**Regina, Sask.**—Bids will be received by the Board of City Commissioners until July 28, for constructing 37,500 sq. yds. pavement, 24,000 lin. ft. curb and gutter, and 175,000 sq. ft. concrete sidewalk.

## MANUFACTURING PLANTS.

(*✚Denotes a contract awarded.*)

**Brunswick, Me.**—Pres. William De Witt Hyde of Bowdoin College, is reported to have announced that the college will have a new gymnasium, the subscriptions to the $100,000 fund having been overpledged. The entire amount raised for the new gym is $104,958.

**Amherst, Mass.**—A dairy building will soon be erected for the Massachusetts Agricultural College, to be of brick and stone, two stories, 62 ft. x 120 ft., to cost $30,000. Jas H. Ritchie, 8 Beacon St., Boston, is Arch.

**Boston, Mass.**—The Parahide Manufacturing Co. has been formed for the manufacture of leather products. Capital, $200,000. Paul Lund is Pres.

**✚Holyoke, Mass.**—The Farr Alpaca Co. has awarded the contract for a large addition to its plant. The mill will be two stories high, of the same design as the other mills, and will cost approximately $150,000.

**Cambridge, Mass.**—The A. B. Smith Co. is about to erect a cigar factory on Massachusetts Ave. To be of concrete construction, three stories, to cost $60,000. Monks & Johnson of Boston are Archs. & Engrs.

**Fall River, Mass.**—The American Printing Co. is adding a story to its largest storehouse. It will provide additional room for the packing department, made necessary by the increase during the past year in the varieties of goods and styles handled.

**Franklin, Mass.**—It is reported that a new blanket mill is to be started in this town. The plant is to be erected near the center of the town, upon a site to be decided upon later. The men interested in the new concern are Walter Clark, recently with the Franklin Felt Co., and previous to that for many years with the Ray Fabric Mills, manufacturing horse blankets at Unionville; William Cutler and Thomas S. McDermott.

**Pittsfield, Mass.**—A large shoe factory is planned by the Pritchard Shoe Co. E. D. Pritchard is the owner of the site.

**Salem, Mass.**—The Witch City Tanning Co. has been formed with a capital of $100,000. Samuel B. Spinney is interested.

**West Springfield, Mass.**—Gilbert & Barker Mfg. Co., 193 Lyman St., Springfield, will erect a manufacturing plant. The Engr. is Edward H. McClintock, 201 Devonshire St., Boston. The cost is $200,000.

**✚Peabody, Mass.**—The H. WALES LINES CO., of Meriden, Conn., has been awarded the contract for the erection of another factory building at the plant of the A. C. Peabody Leather Co. The building will be of reinforced-concrete, 49 x 152 ft., five stories high.

***Pawtucket, R. I.**—The contract has been awarded and work started on the mill of the Crown Manufacturing Co. recently organized here. The factory will have a capacity of 20,000 spindles and cost over $100,000. It is to be 138 ft. wide, three stories high for a section 254 ft. long, and two stories for a section 86 ft. long, the entire length to be 340 ft. In addition, there will be a boiler house 56 by 40, one story high. The location is near the Home Bleach & Dye Works, it is reported.

**Hartford, Conn.**—The Halloid Drug Co. contemplates the erection of a plant for the manufacture of chemicals. The corporation is capitalized at $1,000,000. John H. McCone is Pres.

**Mechanicsville, Conn.**—An order has been placed by the French River Textile Co. with the General Electric Co., for one 500 kilowatt turbine, one 200 kilowatt generator and one 20-horsepower injunction motor.

**Moosup, Conn.**—Contract has been awarded by the Union Mills for the construction of a large weave shed, which will take about 400,000 bricks to build. In this new shed about 1,600 looms will be installed.

**Bridgeport, Conn.**—The American Tube & Stamping Co., it is reported, will erect an addition to its plant. Wm. A. Wilmot, Pres.

**Albany, N. Y.**—W. H. Sample & Son, Beaver and South Pearl Sts., will construct a manufacturing plant to cost about $10,000.

**Buffalo, N. Y.**—Plans are prepared by Dunning & Dunning, 7 Henkel Bldg. for a malt house for H. V. Burns, Jersey and Lake View Sts.

**Buffalo, N. Y.**—Dunning & Dunning, Archs., 7 Henkel Bldg., are preparing plans for a 2-story factory building, 85 x 159 ft., to be erected at Manitoba St., Bates Ave. and the Erie R. R., for the Central Casket Co., Ohio and Chicago Sts. Estimated cost, $40,000.

**Norwood, N. Y.** — The Stebbins Engineering Co., Watertown, N. Y., are preparing plans for a pulp mill, 60 x 100 ft., 1½-story, of steel and concrete, with a concrete flume, 60 x 120 ft., to be built here by Martin Bros. this summer.

**Cohoes, N. Y.**—With a capital stock of $1,000,000 articles of incorporation have been filed with the Secretary of State by the Oneida Regal Textile Co. The company represents the consolidation of several knit goods mills.

**New York, N. Y.**—Plans have been prepared by Howard Chapman, 1123 Broadway for the construction of a 6-story candy factory to be erected at Washington and Park Ave. Wallace & Co., are the owners. The cost is about $100,000.

**Niagara Falls, N. Y.**—Plans are being prepared by Chester R. Phelps, Gluck Bldg., for an extensive electrochemical plant to be erected by Mass & Walstern, Inc., on Adams Ave., and 26th St. The general office is at 100 William St., New York City.

**Edgewater, N. J.**—The Midland Linseed Oil Co., of Minneapolis, has nearly completed arrangements to erect $1,-000,000 plant on the Jersey shore of the Hudson at a point opposite Riverside Drive at 110th St. The company has purchased from the Goetchins estate, owner of a large part of the waterfront at Edgewater, a tract of land fronting about 1,500 ft. on the river. The company has also secured from the State of New Jersey the necessary riparian rights and will start at once to build. When completed it is said that the plant will give employment to over 1,000 operatives. It is understood that the Western plant will be abandoned for the Jersey property.

**Paterson, N. J.**—The Augusta Silk Works have let contracts for the erection of a 4-story mill building, 300 x 60 ft., which is expected to be ready for occupancy by Jan. 1.

**Philadelphia, Pa.**—It is reported that application has been made for a charter as the Continental Eiderdown Co., by Wilson H. Brown, Stanley R. Stager and E. K. Ring, for the purpose of manufacturing eiderdown for various purposes. The capital is placed at $25,000. Wilson H. Brown, formerly an official of the Leicester & Continental Mills, at the sale recently, purchased the eiderdown plant of the mills and has leased the portion of the mill occupied by this department. Arthur J. Unsworth, formerly superintendent and manager of this department, will be in charge. The production is estimated at about 300,000 pounds annually.

**Philadelphia, Pa.**—F. A. Havens & Co. have a contract for a 1-story concrete film storage warehouse, 36 x 130 ft., at 20th and Indiana Ave., for the Lubin Manufacturing Co.

**Philadelphia, Pa.**—A permit was issued to the Philip Halbach Construction Co., to clear the site of 107-09 De Lancey St. for the 5-sty brick and stone warehouse to be erected for Stohrer's Keystone Pickle Wks. Peuckert & Wunder, are the Archs.

**Pittsburg, Pa.**—An independent company has been organized for the purpose of erecting an ice-making plant to supply ice to the entire hill district. Plans of the buildings are being drawn by V. Wyss-Thalman, engineer and architect, of the Wyss-Thalman Manufacturing Co. The buildings and equipment are to cost about $100,-000.

**Baltimore, Md.**—Bids are being received by Naskell Barnes, 501 North Charles St. for the construction of a 1-sty factory for the Townsend Grace Co., 209 and 211 West Fayette St.

**Baltimore, Md.**—The Atlantic Fertilizer Co. will build a big addition to its plant at Curtis Bay for the manufacture and storage of fertilizer and by-products. According to tentative plans, it will be of brick and stone construction, with reinforced concrete foundation and slag roof. The proposed building is to be entirely fireproof. The company has already completed the structural work of its new steel and concrete pier, and the installation of equipment and machinery will commence soon.

**Salisbury, Md.**—The Salisbury Ice Co. intends rebuilding the ice plant destroyed by fire. A 50-ton plant is contemplated. J. D. Price is Gen. Mgr.

**New Orleans, La.**—The United Fruit Co. will erect, it is reported, on the river front a fruit pre-cooling plant. Probable cost, $600,000.

**Maryville, Tenn.**—Plans are being prepared by the Maryville Hosiery Mill for the construction of a plant to replace the building recently burned. The building will be 200 x 60 ft., of brick construction, and equipped with about 125 knitting machines, and accompanying apparatus for manufacturing hosiery, about 600 dozen pairs daily.

**Cincinnati, Ohio.**—A 4-sty factory will be erected by the Cororan Bros.' Lamp Co., 712 Reading Rd. Martin Fisher, 2156 Central Ave. The estimated cost, $40,000.

**Columbus, Ohio.**—Plans are being prepared by Frank L. Packard, New Haden Bldg., for the construction of a factory for the Riley Shoe Mfg. Co.

**Dayton, Ohio.**—A paper mill to be two stories, 80x116 ft., will be erected by the Aetna Paper Co. Plans were prepared by F. G. Mueller, 704 Rentschler Bldg., Hamilton, Ohio.

**✚Middletown, Ohio.**—The general contract has been awarded to CALDWELL & ISENNUNGER, 210 East Fifth St. Iron work to the BROOKVILLE BRIDGE CO., Brookville, Ohio.

**Massillon, Ohio.**—It is reported that the Massillon Bridge & Structural Co. will erect a plant on Coal Ave., building to be 600 x 135 ft. Elton Rice is Pres. and Gen. Mgr.

**Toledo, Ohio.**—A newspaper building will be erected by the Toledo News Bee. Plans are being prepared by Bacon & Huber, 755 Spitzer Bldg.

**Toledo, Ohio.**—According to press reports the Defiance Tick Mitten Co. has purchased a site at a cost of $12,500 and will shortly erect another factory building. The company was organized at Defiance in 1897 and now has seven branches, most of which are located here. With the completion of the new factory, the company will have a capacity of 50,000 dozen a week. P. C. Tiedeman is Pres. and Gen. Mgr.

**South Bend, Ind.**—A factory will be constructed by the Monarch Paper Co., Kalamazoo. D. J. Albertson, 305 West Main St., Kalamazoo, is Engr. and Arch. The cost is about $80,000.

**Connersville, Ind.**—The Central Mfg. Co. has ordered plans on which bids will be asked for the construction of a large addition, doubling the capacity of the present plant.

**Indianapolis, Ind.** — The Cole Motor Car Co. has bought a site at 744-750 East Washington St., and will erect a 4-story building of concrete and steel for factory and storage purposes. Estimated cost, $60,000. Bids will be asked soon.

**Cadillac, Mich.**—The Cadillac Chair Co., will erect a factory and power plant, 70 x 200, 2-story and basement. Plans were prepared by D. J. Albertson, 305 West St., Kalamazoo, Mich. The cost is $60,000.

**Detroit, Mich.**—Plans have been prepared for the construction of a factory for W. A. C. Miller, 406 Moffat Bldg. The cost is about $70,000.

**Chicago, Ill.**—Bestwall Mfg. Co. has begun the construction of its new building. Bucher Bros. are the contractors. This is one of the plants on the tract which the Chicago Union Transfer Co. is developing for manufacturing and industrial purposes.

**Chicago, Ill.**—A varnish factory will be erected by Adams & Elting, 44th and Taylor Sts. Bids are being received by Arch. Francis M. Barton, 178 West Jackson Blvd.

**Freeport, Ill.**—Plans have been completed by Arch. V. M. Dustman, for the construction of a 2-story addition to a factory for the W. T. Rawleigh Medical Co. The estimated cost is $150,000.

**✚Omaha, Neb.**—Plans have been prepared by John Erickson, for the construction of a 4-story brewery for the Willow Spring Brewing Co. The general contract is held by F. C. BORG.

**St. Joseph, Mo.**—The H. J. Heinz Pickle Co., Pittsburg, Pa., intends erecting a cider vinegar factory.

**Ozark, Ark.**—It is stated that J. S. Turner, Will Hill, A. H. Treadway and others, of Ozark, plan the erection of a cotton mill.

**Sour Lake, Tex.**—The Sadler & Czigin Light and Power Co., has taken steps towards installing an ice plant here.

**Bowie, Tex.** — The Peoples Ice Co. will install an ice factory and cold storage plant here.

**Orange, Tex.**—J. S. McKinley will establish a broom factory here.

**Saron, Tex.** — The Cameron Lumber Co. will rebuild its lumber mill here, recently destroyed by fire. The mill will be equipped with modern machinery of a single circle saw-type and will have cutting capacity of 75,000 ft. per day.

**Clifton, Ariz.**—Dr. L. D. Ricketts has been retained by The Arizona Copper Co., Ltd., as consulting engineer in the construction of a large reduction plant 3 miles below this place.

**Douglas, Ariz.**—Plans are being prepared for the Calumet & Arizona Mining Co., for enlarging the Douglas reduction plant at a cost of $1,500,000.

**Tucson, Ariz.**—H. Delano & Sons have secured a site and will erect an extensive ice plant to cost $75,000.

**Los Angeles, Cal.**—Plans are in course of preparation in the engineering offices of the Santa Fe R. R. Co., for the construction of concrete round house, machine shops, storage building, etc., at Barstow, to replace the ones recently destroyed by fire. The cost of the new buildings will be $50,000.

**San Diego, Cal.**—It is reported that Armour & Co. will erect at Seventh and & K Sts., a cold storage plant. Probable cost, $75,000.

**✚Ottawa, Ont.**—The Dominion Steel Co. is planning a plant to cost $15,000,000, for the manufacture of wire and wire products, and has awarded the contract for one mill to cost $1,500,000, and with a capacity of 400 tons daily, to Earl B. Douglass of Allentown, Pa.

**Toronto, Ont.**—The Smith Manufacturing Co., manufacturers of shoddy, cotton batting and glazed cotton wadding, is erecting a new mill to accommodate its increasing business and expects to have all the new machinery installed by the end of August.

**Hamilton, Ont.**—Plans are being prepared by Stewart & Welton, 7 Hughson St., south, Hamilton, for a factory to cost $40,000 for the Diamond Flint Co., James St., north. The building will be 1-story and basement, 300 × 150, steel frame, stone foundation, cement reinforced concrete, steel beams, tile roofing, structural iron. Two glass furnaces required.

**Calumet, Que.**—Fire destroyed the saw mills of the Riordan Paper Co., 1 Beaver Hall Sq. The loss was about $200,000. They will probably be reconstructed.

**Edmonton, Alta.**—Plans are being prepared for the construction of a manufacturing plant for the Portland Cement Co., incorporated with a capital of $1,500,000. M. Classasskil, Edmonton, is Engr.

**Sault Ste Marie, Ont.**—It is reported that the Lake Superior Pulp & Paper Co. will erect a $4,000,000 paper mill. The building will be 500 × 180 ft. and will take 18 months to erect. A new cofferdam is being constructed to augment the power now supplied to the pulp mill, and the output of pulp will also be increased by another 500 tons per day to supply the paper plant. A battery of fourteen boilers is also to be installed in the old power-house of the sulphite mill. The plant will employ about 300 hands. Bonds to the value of about $3,500,000 were floated in London several weeks ago. The industry when completed will represent an investment of $8,000,000.

**✚Sydney, N. S.**—EARL B. DOUGLAS, Allentown, is under contract to build an immense wire mill for the Dominion Iron and Steel Co., at Sydney, N. S. The contract provides that he shall construct and operate a wire mill to cost not less than $1,500,000. The plant is to turn out at least 400 tons of finished wire products a day. The Dominion Iron and Steel Company's decision to construct a wire mill is only one feature of a great plan whereby £3,000,000 is to be expended in improvements and enlargements in the next two years.

## MISCELLANEOUS CONTRACTS.

**U. S. RECLAMATION SERVICE.**—All news concerning canal and Irrigation projects, etc., will be found under Water Supply—Irrigation.

***Dredging.** — Boston, Mass.—Bids were received as follows on July 18 by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Boston, for dredging at Boston: (a) 145,770 cu. yds., scow measurement; (b) 10 cu. yds. boulders; (c) totals: Eastern Dredging Co., Boston, (a) 22.4 cts., (b) $8, (c) $32,732; Charles M. Cole, Fall River, Mass., (a) 21 cts., (b) $10, (c) $30,712; J. S. Packard Dredging Co., Providence, R. I., (a) 19.9 cts., (b) $9.50, (c) $29,103.

**Subways.**—Boston, Mass.—The Legislature has passed the bill providing for three subways, Boylston St., South Boston and the West End loop. These involve the expenditure of probably $9,000,000 within the next few years. Edmund S. Davis is Acting Ch. Engr., Transit Comn.

**Docks and Wharves.**—Boston, Mass.—The Legislature has passed the bill providing for the expenditure of $9,000,000 for the improvement of Boston Harbor, including the construction of docks and wharves. The act provides for the appointment of a commission of five, of which the chairman shall be a civil engineer. Another member shall be from the Massachusetts Harbor and Land Commission.

**✚Sanitary and Locker Building.**—Boston, Mass.—The contract for the sanitary building on the Strandway Playground, South Boston, was awarded on July 18 to the J. E. LOCATELLI CO., at $17,641. Other bidders were: Strout Bros. Construction Co., $18,104; A. Piotti, $17,600; McGahey & O'Connor, $19,356; William Crane, $19,619; Louis B. Cadario, $19,830; McDonald & Kivell, $21,592. Robert S. Peabody is Chn. Park Comn.

**Dredging.**—Boston, Mass.—The following bids were received by the Harbor and Land Commissioners on July 21 for dredging Manchester Harbor: J. P. O'Riorden, Charlestown, 26.2 cts. per cu. yd; John R. Burke, Wollaston, 28⅝ cts.; Bay State Dredging Co., Ltd., 26.9 cts.; also for dredging for anchorage basin at Hough's Neck, Quincy: Bay State Dredging Co., Ltd., 28.9 cts.; J. P. O'Riorden, 29⅞ cts.; Eastern Dredging Co., 33 cts. per cu. yd. Frank W. Hodgdon is Ch. Engr.

**Statue.** — Waterbury, Conn. — The committee in charge of the bequest of Elisha Leavenworth have engaged Paul Wayland Bartlett to model the statue of Benjamin Franklin for which Mr. Leavenworth donated $15,000.

**Harbor Improvement.**—New London, Conn.—The Senate has passed the bill authorizing the State to issue $1,000,000 of bonds for improving New London Harbor so as to make it suitable for wharfing ocean-going steamers.

***Dredging.**—New York, N. Y.—Bids will be received until noon, Aug. 7, by Col. W. M. Black, Corps Engrs., U. S. A., Army Bldg., 39 Whitehall St., New York, for dredging in Wappinger Creek, N. Y., and in harbors at Tarrytown and Peekskill, N. Y.

**Terminal Posts.**—New York, N. Y.—Bids will be received by Joseph Johnson, Fire Comr., until 10.30 a. m., Aug. 4, for furnishing and delivering terminal posts for the fire alarm telegraph, Boros. Manhattan and Brooklyn.

**Coal Pocket.**—Schenectady, N, Y.—The Delaware & Hudson R. R. Co. will build a coal pocket 400 ft. long and several stories high on Van Guysling Ave.

**Dock.**—Buffalo, N. Y.—Plans are being completed by the Cleveland & Buffalo Transit Co., for a dock to be constructed at Commercial slip in Buffalo River for use of the Crystal Beach Line steamers.

**Pier.**—Jersey City, N. J.—The Harbor Board is considering plans for the improvement of the Morgan St. pier. Estimated cost, $65,000.

**✚Wharves.**—Philadelphia, Pa. — The Lighthouse Inspector, Fourth District, Philadelphia, received bids on July 5, for rebuilding at Edgemoor Lighthouse Depot, Del. The AMERICAN PAVING & CONSTRUCTION CO., 211 South Ninth St., Philadelphia, has been awarded the contract at $28,811.

**✚Concreting, Etc., Floors.** — Allentown, Pa.—Doyle & Co. of Philadelphia, Pa., who received the award from the Rittersville Homeopathic Insane Asylum Commission to complete the institution, awarded the contract on July 22, for concreting, cementing floors, reinforcing floors and cinder filling to finish the hospital, to SCHAEFFER & ACKERMAN, of Allentown. The contract includes about 150,000 sq. yds.

**✚Coal-Handling Equipment, Etc.**—Washington, D. C.—The contract for installing coal and ash-handling equipment in the old post-office at Washington has been awarded to the R. H. BEAUMONT CO., of Philadelphia, Pa. List of bids noted on July 13.

***Elevator.**—Washington, D. C.—Bids will be received until 2 p. m., Aug. 8, by the Department of The Interior, Washington, for the installation of one electric elevator and the construction of the necessary shaft and penthouse therefor, at the Freedmen's Hospital buildings, Washington, in accordance with the specifications and drawings, copies of which may be obtained upon application to the Chief Clerk of the Department. Carmi A. Thompson is Asst. Secy.

**✚Colliers, Tugs.**—Washington, D. C. —The Secretary of the Navy has awarded contracts for the construction of naval colliers Nos. 9 and 10 to the NEWPORT NEWS SHIP & ENGINE BLDG. CO., of Newport News, Va., colliers Nos. 11 and 12 to the MARYLAND STEEL CO., of Sparrows Point, Md., and for the construction of two steel tugs to the NEW YORK SHIPBUILDING CO., of Camden, N. J.

**Life-Saving Stations.** — Washington, D. C.—The following bids have been received by the Life-Saving Service, Washington, for the construction of life-saving stations at (a) Bluepoint; (b) Quogue; (c) Smith's Point; (d) Tiana, Long Island, N. Y.: Robbins-Ripley Co., New York, (a) $11,880, (b) $11,880, (c) $11,880, (d) $11,880; George W. Wines, East Quogue, N. Y., (a) $8,945, (b) $8,195, (c) $8,945, (d) $9,395; Darling & Slade, Newport, R. I., (a) $11,410, (b) $11,110, (c) $11,410, (d) $11,410; F. W. Jackson & Sons, Good Ground, N. Y., (b) $8,2[illegible] (d) $8,665; H. B. Smith Bldg. Co., [illegible] Shore, N. Y., all, $35,000.

**Lockkeepers' Houses.**—[illegible]eeling, W. Va.—Bids were receive[illegible] follows on July 17, by Maj. F. W. Altstaetler, Corps Engrs., U. S. A., [illegible]eeling, for building six 2-story, 8-r[illegible] lockkeepers' houses, two each at [illegible]ms Nos. 12, 19 and 20, Ohio River: [illegible] brick and frame construction, each [illegible] fireproof tile construction; (c) ex[illegible] concrete, per cu. yd.; (d) extra gr[illegible]ng, per cu. yd.; (e) days when houses [illegible]ill be completed; Earl N. Everson, [illegible]liant, Ohio, two, Dam 12, (a) $5,579, [illegible] $5,749, (c) $8, (d) 50 cts., (e) 130; T[illegible] Guy Johnston Contracting Co., T[illegible]onto, Ohio, two, Dam 12, (a) $5,775, [illegible] $5,837, (c) $8, (d) 60 cts., (e) 150; [illegible], Dam 19, (a) $5,763, (b) $5,867, (c) [illegible] (d) 60 cts., (e) 200; two, Dam 20, [illegible] $5,786, (b) $5,897, (c) $8, (d) 60 cts., [illegible] 200; The Finley Bros. Co., Chester, [illegible] Va., two, Dam 12, (a) $6,100, (c) $[illegible] (d) 60 cts., (e) 200; Volney E. Taylor, Huntington, W. Va., two, Dam 12, (a) [illegible],135, (c) $8, (d) $1, (e) 250; two, Dam 1[illegible] (a) $5,995, (c) $7.65, (d) 90 cts., (e) [illegible]; two, Dam 20, (a) $5,995, (c) $7.65, (d) 90 cts., (e) 175; Hart & Beard, Whe[illegible]ng, W. Va., two, Dam 12, (a) $5,659, [illegible] $9, (d) 25 cts., (e) 120.

**Drainage District.**—Lumberton, N. C. —T. F. Wetmore, of Lumberton, has completed prelimniary surveys for the construction of Cold Water Creek Drainage District, to be ten miles long, and requiring about 500,000 cu. yds. of excavation.

**Dredge.**—Charleston, S. C.—Bids will be received until 11 a. m., Aug. 12, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for a 12-in. electrically-driven suction dredge for the United States navy yard at Charleston. Plans and specifications can be obtained on application to the Bureau or to the Commandant of the navy yard. R. C. Hollyday is Ch. of Bureau.

(Continued on page 46.)

## CONTRACT PRICES.

(✚*Denotes a contract awarded.*)

**✚*Sewer System.**—Madison, S. Dak.—Bids for constructing a sewer system were received on July 6, by William Roe, City Audr., as follows: (A) Frazer & Danforth, Rochester, Minn.; (B) G. S. Redmon, Pipestone, Minn.; (C) Lytle Construction Co., Sioux City, Iowa; (D) Tibey Bros., Dubuque, Iowa; (E) R. W. Forrestal, Milwaukee, Wis.; (F) Inter-Mountain Bridge and Construction Co., Tecumseh, Neb.; (G) Dunnegan & Briggs, Shenandoah, Iowa; (H) MEEKER & DOBSON, Lincoln, Neb., (awarded contract); (I) Bentz & White, Centerville, S. Dak.; (J) L. W. Schruth, Fargo, N. Dak.; (K) William Welsh, Bridgewater, S. Dak.; (L) Tanner Bros, Webster, S. Dak.; (M) Roberts & Few, Brookings, S. Dak.; (N) A. L. Jones, Sioux Falls, S. Dak.; (O) Everitt & Hitch, Brainerd, Minn.; (P) W. E. Rosecrans, Ames, Iowa; (Q) H. J. Cathroe, Omaha, Neb.; (R) Cook Construction Co., Des Moines, Iowa; (S) E. L. Dimick, Laurel, Neb.; (T) R. B. Airey, Pierre, S. Dak.; (U) J. J. Connolly, St. Paul, Minn.; (V) C. R. McKay, Omaha, Neb.; (W) Average of all bids received; (X) Engineers' estimate. The item bids were:

SEWER SYSTEM. MADISON, SOUTH DAKOTA.

| | A | B | C | D | E | F | G | H | 1 | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3,350 lin. ft. 6-in. vitrified pipe sewer | $0.50 | $0.40 | $0.48 | $0.60 | $0.54 | $0.43 | $0.55 | $0.50 | $0.50 | $0.65 | $0.65 | $0.60 |
| 11,520 lin. ft. 8-in. vitrified pipe sewer | .65 | .70 | .59 | .60 | .55 | .54 | .68 | .60 | .62 | .95 | .80 | .80 |
| 3,325 lin. ft. 10-in. vitrified pipe sewer | .80 | 1.05 | .65 | .70 | .69 | .66 | .79 | .68 | 1.00 | 1.35 | .90 | 1.00 |
| 6,060 lin. ft. 12-in. vitrified pipe sewer | 1.30 | 1.10 | .85 | .85 | .87 | .80 | .89 | .85 | 1.20 | 1.85 | 1.25 | 1.10 |
| 2,670 lin. ft. 15-in. vitrified pipe sewer | 1.80 | 1.70 | 1.10 | 1.30 | 1.14 | 1.83 | 1.00 | 1.05 | 2.35 | 2.45 | 2.00 | 1.50 |
| 3,500 lin. ft. 18-in. (standard) vitrified pipe sewer | 1.00 | .90 | 1.29 | 1.10 | 1.17 | 1.00 | 1.35 | .99 | 1.00 | 1.60 | 2.00 | 1.30 |
| 1,000 lin. ft. 18-in. (double strength) vitrified pipe sewer | 1.10 | 1.00 | 1.30 | 1.20 | 1.17 | 1.08 | 1.50 | 1.00 | 1.20 | 1.70 | 2.00 | 1.40 |
| Y-connections (each, in addition to straight pipe): | | | | | | | | | | | | |
| 6 × 6-in | .40 | .60 | .40 | .25 | .34 | .75 | .75 | .50 | .30 | .25 | .448 | 1.70 |
| 8 × 6-in | .70 | .85 | .60 | .30 | .55 | 1.00 | .75 | .75 | .50 | .40 | .668 | 2.50 |
| 10 × 6-in | .90 | 1.10 | .70 | .35 | .74 | 1.25 | 1.00 | 1.00 | .60 | .50 | .856 | 3.00 |
| 12 × 6-in | 1.20 | ... | 1.00 | .40 | .95 | ... | ... | .75 | .65 | .60 | 1.05 | 4.00 |
| 15 × 6-in | 1.80 | 1.60 | 1.20 | .60 | 1.65 | 2.00 | 1.70 | 2.00 | 1.00 | .75 | 1.25 | 5.00 |
| Manholes (without cover) on 18-in. outlet sewer, each | 30.00 | 40.00 | 25.00 | 15.00 | 30.00 | 24.00 | 40.00 | 30.00 | 25.00 | 40.00 | 30.00 | 30.00 |
| Manholes (without cover) on all except 18-in. outlet sewer, ea. | 40.00 | 30.00 | 35.00 | 40.00 | 30.00 | 42.00 | 40.00 | 37.50 | 40.00 | 40.00 | 30.00 | 40.00 |
| 85 c.-i. manhole covers, in place | ... | 10.00 | 7.00 | 5.00 | 7.00 | 10.00 | 9.00 | 10.00 | 10.00 | 10.00 | ... | 12.00 |
| Flush tank No. 1, complete | 100.00 | 60.00 | 85.00 | 70.00 | 70.00 | 100.00 | 66.00 | 92.50 | 80.00 | 105.00 | 100.00 | 100.00 |
| Flush tank No. 2, complete | 90.00 | 60.00 | 100.00 | 70.00 | 70.00 | 100.00 | 125.00 | 130.00 | 80.00 | 105.00 | 100.00 | 100.00 |
| Flush tank No. 3, complete | 110.00 | 60.00 | 85.00 | 70.00 | 70.00 | 100.00 | 140.00 | 92.50 | 80.00 | 165.00 | 100.00 | 200.00 |
| Flush tanks Nos. 4 and 5, complete, each | 100.00 | 60.00 | 90.00 | 70.00 | 70.00 | 100.00 | 66.00 | 92.50 | 80.00 | 105.00 | 100.00 | 100.00 |
| 300 lin. ft. 16-in. c.-i. pipe, in place | 3.00 | 2.25 | 4.00 | 3.50 | 4.00 | 5.20 | 3.00 | 2.60 | 4.00 | 3.80 | 3.00 | 3.50 |
| 48 lin. ft. 18-in. c.-i. pipe, in place | 4.00 | 2.85 | 5.00 | 3.50 | 5.00 | 5.00 | 3.00 | 4.00 | 3.00 | 4.00 | 3.00 | 3.50 |
| Total amount of bid, exclusive of Y-connections | $33,899 | $32,599 | $29,590 | $29,864 | $28,905 | $30,421 | $31,124 | $28,499 | $36,017 | $47,770 | $43,088 | $37,110 |

| | M | N | O | P | Q | R | S | T | U | V | W | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3,350 lin. ft. 6-in. vitrified pipe sewer | $0.43 | $0.46 | $0.55 | $0.625 | $0.57 | $0.695 | $0.48 | $0.66 | $0.48 | $0.60 | $0.54 | $0.49 |
| 11,520 lin. ft. 8-in. vitrified pipe sewer | .61 | .69 | .67 | .675 | .68 | .785 | .63 | .71 | .53 | .71 | .67 | .61 |
| 3,325 lin. ft. 10-in. vitrified pipe sewer | 1.20 | .83 | .89 | .7625 | .87 | .975 | .71 | .88 | .69 | .84 | .84 | .78 |
| 6,060 lin. ft. 12-in. vitrified pipe sewer | 1.40 | 1.05 | 1.10 | .85 | .88 | 1.10 | 1.00 | .98 | .90 | .90 | 1.05 | .94 |
| 2,670 lin. ft. 15-in. vitrified pipe sewer | 1.79 | 1.59 | 1.49 | 1.025 | 1.80 | 1.34 | 1.60 | 1.29 | 1.20 | 1.65 | 1.55 | 1.40 |
| 3,500 lin. ft. 18-in. (standard) vitrified pipe sewer | 1.00 | 1.01 | 1.31 | 1.40 | 1.06 | .965 | 1.00 | 1.35 | .95 | 1.10 | 1.17 | 1.07 |
| 1,000 lin. ft. 18-in. (double strength) vitrified pipe sewer | 1.40 | 1.12 | 1.52 | 1.47 | 1.17 | 1.31 | 1.15 | 1.48 | 1.00 | 1.30 | 1.25 | 1.00 |
| Y-connections (each, in addition to straight pipe): | | | | | | | | | | | | |
| 6 × 6-in | .22 | .35 | 1.32 | .20 | .25 | .45 | .20 | .45 | .20 | .24 | .39 | .23 |
| 8 × 6-in | .34 | .65 | 1.65 | .30 | .35 | .75 | .25 | .70 | .30 | .34 | .55 | .38 |
| 10 × 6-in | .45 | .75 | 2.18 | .40 | .50 | .95 | .35 | .90 | .40 | .51 | .71 | .46 |
| 12 × 6-in | .63 | 1.30 | 2.74 | .65 | .60 | ... | .55 | 1.75 | .50 | .63 | .82 | .57 |
| 15 × 6-in | .87 | ... | 3.78 | 1.10 | .85 | 1.85 | .80 | ... | .65 | .875 | 1.25 | .84 |
| Manholes (without cover) on 18-in. outlet sewer, each | 30.00 | 45.00 | 31.50 | 35.00 | 37.50 | 35.00 | 22.75 | 35.00 | 40.00 | 42.00 | 32.03 | 23.00 |
| Manholes (without cover) on all except 18-in. outlet sewer, ea. | 37.00 | 45.00 | 49.50 | 42.00 | 37.50 | 54.00 | 38.75 | 40.00 | 45.00 | 42.00 | 39.77 | 34.00 |
| 85 c.-i. manhole covers, in place | 10.00 | 9.00 | 8.00 | 9.00 | 12.50 | 7.75 | 9.00 | 12.00 | 8.50 | 13.00 | 9.04 | 8.50 |
| Flush tank No. 1, complete | 80.00 | 83.00 | 99.50 | 60.00 | 120.00 | 86.00 | 66.00 | 100.00 | 100.00 | 125.00 | 88.00 | 74.00 |
| Flush tank No. 2, complete | 87.00 | 130.00 | 104.50 | 100.00 | 120.00 | 100.00 | 71.00 | 100.00 | 95.00 | 125.00 | 98.21 | 104.00 |
| Flush tank No. 3, complete | 80.00 | 83.00 | 95.00 | 60.00 | 95.00 | 115.00 | 88.00 | 100.00 | 105.00 | 125.00 | 100.40 | 74.00 |
| Flush tanks Nos. 4 and 5, complete, each | 80.00 | 83.00 | 98.50 | 63.00 | 95.00 | 112.50 | 66.00 | 100.00 | 100.00 | 125.00 | 88.40 | 74.00 |
| 300 lin. ft. 16-in. c.-i. pipe, in place | 3.75 | 2.80 | 3.39 | 2.40 | 4.50 | 3.21 | 3.15 | 5.60 | 3.50 | 5.00 | 3.60 | 3.50 |
| 48 lin. ft. 18-in. c.-i. pipe, in place | 3.00 | 3.80 | 3.93 | 2.80 | 5.50 | 3.10 | 2.75 | 6.00 | 4.10 | 5.50 | 3.92 | 2.85 |
| Total amount of bid, exclusive of Y-connections | $36,037 | $33,126 | $35,449 | $32,360 | $34,993 | $35,961 | $31,431 | $32,392 | $33,083 | $34,845 | $33,929 | $30,362 |

# LIST OF CONTRACTS PENDING

## Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

| Bids close. | | Noted in issue of |
|---|---|---|
| 8- 7 | Canal, Provo, Utah....(S.) | 7-27 |
| 8-10 | Drainage canals, Tallahassee, Fla. ....(S.) | 7-20 |
| 8-12 | Wharf, pipe line, Cuba..(S.) | 7-13 |
| 8-19 | Feeder panels, Boston, Mass. (S.) | 7-27 |

## Light, Heat and Power Plants.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Electric light plant, McKenzie, Tenn. | 7-27 |
| 7-27 | Transmission line, Orillia, Ont. | 7-27 |
| 7-28 | Boilers and accessories, New York, N. Y. | 7-27 |
| 7-31 | Elec. equipment, New York. | 7-20 |
| 7-31 | Elec. fixtures, Cincinnati, O. | 7-20 |
| 8- 1 | Lamp standards, Washington, D. C. | 7-20 |
| 8- 1 | Electric railway, Brantford, Ont. | 6-29 |
| 8- 1 | Lighting apparatus, Columbus, Ohio | 7-27 |
| 8- 2 | Street lighting, Paterson, N. J. | 7-27 |
| 8- 4 | Turbo-generator unit, etc., Panama (U. S. Poss.) | 7-20 |
| 8- 6 | Power plant and equipment, Phoenix, Ariz. | 7-27 |
| 8- 8* | Railway construction, Sisterville, W. Va. (Elec. Rys.) | 7-27 |
| 8- 9 | Generators and switchboard, Baltimore, Md. | 7-27 |
| 8-10 | Tubular boilers, Athens, Ohio | 7-27 |
| 8-10 | Generators, etc., Penticton, B. C. | 7-20 |
| 8-12 | Lamps and feed wires, Mount Vernon, Ohio | 7-27 |
| 8-17* | Railway construction, Campbelltown, Pa. (Elec. Rys.) | 7-27 |
| 8-31 | Generator sets, Los Angeles, Cal. | 7-13 |
| 9-25 | Electrical supplies, Brazil (Foreign) | 7-27 |
| 1-30, 1912 | Power generating and pumping plants, Australia (Foreign) | 6-15 |

## Bridges.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Bridge, Evansvile, Ind. | 7-27 |
| 7-27 | Bridge, Plainfield, N. J. | 7-27 |
| 7-28 | Bridge, Indianapolis, Ind. | 7-27 |
| 7-28 | Bridges, Spottsylvania, Va. | 7-27 |
| 7-28 | Bridges, Jacksonville, Fla. | 7-27 |
| 7-28 | Bridge work, Cincinnati, O. | 7-13 |
| 7-29 | Bridge, Pittsburg, Pa. | 7-13 |
| 7-31 | Bridge, Hartford, Conn. | 7-20 |
| 7-31 | Bridge, Hillsboro, Ill. | 7-27 |
| 7-31 | Bridge, Collinsville, Ill. | 7-27 |
| 8- 1 | Bridges, Indianapolis, Ind. | 7-27 |
| 8- 1 | Bridges, Jersey City, N J. | 7-27 |
| 8- 1* | Bridge, Shreveport, La. | 7-13 |
| 8- 2 | Bridges, Ashland, Ohio | 7-20 |
| 8- 3 | Bridges, Portsmouth, Ohio | 7-27 |
| 8- 4 | Bridge, Albert Lea, Minn. | 7-27 |
| 8- 5 | Bridges, Muskogee, Okla. | 7-27 |
| 8- 5 | Bridges, Omaha, Neb. | 7-27 |
| 8- 5 | Bridges, Metropolis, Ill. | 7-20 |
| 8- 5 | Bridge, Timewell, Ill. | 7-20 |
| 8- 5* | Bridge, Massena, N. Y. | 7-20 |
| 8- 5* | Bridge, Benton, Tenn. | 7-20 |
| 8- 5* | Bridge, Chicago, Ill. | 7-27 |
| 8- 7 | Bridges, Grenada, Miss. | 7-27 |
| 8- 7 | Bridges, San Andreas, Cal. | 7-27 |
| 8- 7 | Bridge, Youngstown, Ohio | 7-27 |
| 8- 8 | Bridge, Plymouth, Ind. | 7-27 |
| 8- 8 | Bridges, Cambridge, Ohio | 7-20 |
| 8- 8 | Substructure, Steubenville, Ohio | 7-20 |
| 8- 8 | Bridge, Madison, Ind. | 7-27 |
| 8- 8 | Bridge, Rockville, Ind. | 7-27 |
| 8- 9 | Bridges, Hamilton, Ohio | 7-27 |
| 8-16 | Approaches, Columbus, Ohio | 7-27 |
| 8-23 | Bridges, Bristol, Va. | 7-27 |
| 8-31 | Bridge, Bermuda, La. | 7-27 |
| 9- 1 | Bridges, Siam (Foreign) | 6-29 |
| 9- 6* | Bridge, Tampa, Fla. | 7-13 |

## Buildings.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Laundry building, Jamestown, N. Dak. | 7-27 |
| 7-27 | Office building, Clarksdale, Miss. | 7-27 |
| 7-27 | Building, Knoxville, Iowa | 7-27 |
| 7-28* | U. S. post-office, Rock Springs, Wyo. | 6-22 |
| 7-29 | Infirmaries and pavilions, Lima, Ohio. | 7- 6 |
| 7-31 | U. S. post-office, Chicago Heights, Ill. | 7- 6 |
| 7-31 | Fire station, New York | 7-20 |
| 7-31 | Addition to post-office, Kingston, Ont. | 7-20 |
| 7-31 | Pub. bldg., Humboldt, Sask. | 7-20 |
| 7-31 | Remodeling jail, New Philadelphia, Pa. | 7-27 |
| 8- 1 | U. S. post-office, Huron, S. Dak. | 6-29 |
| 8- 1 | Pavilion, Wilberforce, Ohio | 7-13 |
| 8- 1 | School, Kingsley, Iowa | 7-13 |
| 8- 2 | U. S. post-office, Great Bend, Kan. | 6-29 |
| 8- 3 | U. S. post-office, Princeton, Ind. | 7- 6 |
| 8- 3 | Station and other buildings, Ottawa, Ont. | 7-20 |
| 8- 3 | Jail, Canby, Minn. | 7-27 |
| 8- 4 | U. S. post-office, Sulphur Springs, Tex. | 6-29 |
| 8- 5* | Building, Perry, N.Y. | 7-27 |
| 8- 7* | Memorial Institute, Richmond, Va. | 7-13 |
| 8- 8 | U. S. post-office, Juneau, Alaska | 7-20 |
| 8- 8 | Building, Dundas, Ont. | 7-27 |
| 8- 8 | Remodeling jail, Brazil, Ind. | 7-27 |
| 8-10 | U. S. post-office, Lebanon, Ky. | 7-20 |
| 8-10 | U. S. Postoffice, Princeton, Ind. | 7-27 |
| 8-14* | U. S. post-office, Richford, Vt. | 7-20 |
| 8-15 | Addition to Parliament building, Victoria, B. C. | 7-27 |
| 8-16 | U. S. post-office, Massillon, Ohio | 7-20 |
| 8-17 | U. S. post-office, Mineral Wells, Tex. | 7-20 |
| 8-19 | Training school, San Jose, Cal. | 7-27 |
| 8-24 | Building, Albany, N. Y. | 7-27 |
| 8-29 | U. S. post-office, Wallingford, Conn. | 7-20 |
| 8-30* | Post-office, Eufaula, Ala. | 7-27 |
| 9- 1 | High school, South Bend, Ind. | 7-27 |

## Water-Works.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Well, Friar Point, Miss. | 7-27 |
| 7-27 | Water system, etc., Lake Bluff, Ill. | 7-27 |
| 7-28 | Pipe, vales, etc., Mineapolis, Minn. | 7-27 |
| 7-28 | Pipe, Boston, Mass. | 7-27 |
| 7-29 | Pipe, St. Charles, Mo. | 7-27 |
| 7-29* | Sterlization plant, etc., Suffern, N. Y. | 7-13 |
| 7-31 | Conduit work, Lincoln, Neb. | 7-20 |
| 7-31 | Well, Bottineau, N. Dak. | 7-27 |
| 7-31 | Water-works, Westfield, Ill. | 7-27 |
| 7-31 | Water pipe, etc., Aiken, S. C. | 7-27 |
| 7-31 | Flume, Rockport, Mo. | 7-27 |
| 8- 1 | Pipe and specials, Portland, Ore. | 7-27 |
| 8- 1* | Reservoir, Americus, Ga. | 7-27 |
| 8- 1* | Pipe and specials, Athol, Mass. | 7-27 |
| 8- 1 | Fire hydrants, Coeur d' Alene, Idaho | 7-20 |
| 8- 1 | Water conduit, New York | 7-20 |
| 8- 1 | Steel tanks, etc., Cherry, Ill. | 7-13 |
| 8- 2 | Watermains, Prairie City, Iowa | 7-20 |
| 8- 2 | Well, Salt Lake City, Utah | 7-27 |
| 8- 2 | Well, trenches, etc., Alice, Minn. | 7-27 |
| 8- 3 | Watermains, New York | 7-27 |
| 8- 3 | Pipe, castings, etc., New York | 7-27 |
| 8-3* | Gate-valves, etc., New York. | 7-20 |
| 8- 3* | Water-wks, McKenzie, Tenn | 7-20 |
| 8- 4 | Boilers, main, Pittsburg, Pa. | 7-27 |
| 8- 4 | Watermains, Nottingham, Ohio | 7-27 |
| 8- 4 | Water pipe, Corpus Christi, Tex. | 7-27 |
| 8- 4 | Water pipes, Highland Park, Ill. | 7-27 |
| 8- 4 | Pipe laying, Cincinnati, O. | 7-27 |
| 8- 5 | Irrigation system, Manteca, Cal. | 7-13 |
| 8- 7 | Canal, Provo, Utah | 7-27 |
| 8- 7* | Water-works, Oak Harbor, Ohio | 7-27 |
| 8- 7* | Laying water pipe, Pittsfield, Mass. | 7-27 |
| 8- 8 | Water-works, Anselmo, Neb. | 7-27 |
| 8- 9* | Standpipe, etc., Ithaca, N. Y. | 7-27 |
| 8-10 | Water-works, Malino, Neb. | 7-27 |
| 8-11 | Water- works extension, Burlington, Kan. | 7-27 |
| 8-11 | Water-works, Ogallala, Neb. | 7-27 |
| 8-12 | Watermain, Italy (Foreign) | 7-27 |
| 8-12 | Water mains, Newburg, Ohio. | 7-20 |
| 8-17 | Water system, Lubbock, Tex. | 7-27 |
| 8-16* | Pump, Madison Barracks, N. Y. | 7-27 |
| 8-22* | Water pipe, Matteawan, N.Y. | 7-27 |
| 8-23 | Water - works, Thomaston, Ga. | 7-27 |

## Sewers.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Sewers, Riverton, N. J. | 7-27 |
| 7-28 | Sewers, New Haven, Conn. | 7-27 |
| 7-28 | Sewers, Boston, Mass. | 7-27 |
| 7-29 | Sewer, West View, Pa. | 7-27 |
| 7-29 | Sewers, Lake Forest, Ill. | 6-29 |
| 7-31* | Sewers, Harrisburg, Pa. | 7-13 |
| 7-31 | Sewers, Ada, Ohio | 7-20 |
| 7-31 | Sewer pumping station, Minot, N. Dak. | 7-27 |
| 7-31 | Sewers, New York, N. Y. | 7-27 |
| 7-31 | Sewers, San Francisco, Cal. | 7-27 |
| 8- 1 | Sewer system, Winters, Cal. | 7-27 |
| 8- 1 | Sewers, Boston, Mass. | 7-27 |
| 8- 1 | Sewers, Crafton, Pa. | 7-27 |
| 8- 1 | Sewers, Summit, N. J. | 7-27 |
| 8- 1 | Sewage plants, Ligonier, Pa. | 7-13 |
| 8- 2 | Sewer, Alamosa, Colo. | 7-20 |
| 8- 2 | Sewer, Binghamton, N. Y. | 7-27 |
| 8- 2 | Sewers, Pella, Iowa | 7-27 |
| 8- 4* | Sewers, Toronto, Ont. | 7-20 |
| 8- 4 | Sewers, Nottingham, Ohio | 7-27 |
| 8- 4 | Sewers, Louisville, Ky. | 7-27 |
| 8- 5* | Sewers, Neligh, Neb. | 7-20 |
| 8- 7 | Sewers, Huntington, W. Va. | 7-20 |
| 8- 9 | Sewers, Florence, Wis. | 7-27 |
| 8-10* | Sewers, Lebanon, Pa. | 7-20 |
| 8-10* | Sewers, Nashville, Tenn. | 6-29 |
| 8-21 | Sewers, Clinton, S. C. | 7-27 |
| 8-12 | Sewers, Newburg, Ohio | 7-20 |
| 8-15* | Sewers, Fitchburg, Mass. | 7-27 |
| 8-22* | Sewer pipe, Matteawan, N. Y. | 7-27 |
| 8-23 | Sewer system, Thomaston, Ga. | 7-27 |
| 9-11 | Sewers, New Orleans, La. | 7-27 |
| 9-11* | Sewers, New Orleans, La. | 7-13 |

## Streets and Roads.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-27 | Grading, etc., Newark, N. J. | 7-27 |
| 7-27 | Paving, Shreveport, La. | 7-27 |
| 7-27 | Paving, Grand Rapids, Mich. | 7-27 |
| 7-27 | Paving, etc., Wilmette, Ill. | 7-27 |
| 7-28 | Paving, etc., Regina, Sask. | 7-27 |
| 7-28 | Grading, East Liverpool, Ohio | 7-27 |
| 7-28 | Road improvement, Mansfield, Ohio | 7-27 |
| 7-28 | Sidewalks, Salt Lake City, Utah | 7-27 |
| 7-28 | Paving, etc., Buffalo, N. Y. | 7-20 |
| 7-28 | Street improvements, Wapakonta, Ohio. | 7-13 |
| 7-28 | Gravel road, Rushville, Ind. | 7-13 |
| 7-28 | Street improvement, Danville, Ind. | 7-13 |
| 7-29 | Road, St. Francisville, Ill. | 7-20 |
| 7-29 | Road repairs, Cleveland, O. | 7-20 |
| 7-29 | Paving, etc., Racine, Wis. | 7-27 |
| 7-30 | Pavement, Welland, Ont. | 7-13 |
| 7-31 | Grading and macadamizing, Bowling Green, Ohio. | 7-13 |
| 7-31* | Paving, etc., Woodstown, N. J. | 7- 6 |
| 7-31 | Grading, etc., Bowling Green, Ohio. | 7- 6 |
| 7-31 | Grading, Washington, D. C. | 7-20 |
| 7-31 | Roads, Huntington, Ind. | 7-20 |
| 7-31 | Paving, etc., Fayette, Ohio. | 7-20 |
| 7-31 | Paving, etc., Seattle, Wash. | 7-20 |
| 7-31 | Road construction, Portland, Me. | 7-27 |
| 7-31 | Grading, etc., New York, N. Y. | 7-27 |
| 7-31 | Paving, Boston, Mass. | 7-27 |
| 7-31 | Repaving, New Castle, Pa. | 7-27 |
| 8- 1 | Highway, New Orleans, La. | 7- 6 |
| 8- 1 | Street paving, Lafayette, Ind. | 7-13 |
| 8- 1 | Walks, etc., Columbus, Ohio | 7-20 |
| 8- 1 | Paving, etc., Chillicothe, O. | 7-27 |
| 8- 1 | Road binder, New York, N. Y. | 7-27 |
| 8- 1 | Surfacing, etc., Annapolis, Md. | 7-27 |
| 8- 1 | Paving, West New York, N. J. | 7-27 |
| 8- 1 | Grading, etc., Shiloh, Ohio | 7-27 |
| 8- 1 | Paving, Naugatuck, Conn. | 7-27 |
| 8- 1 | Paving, etc., Toronto, Ont. | 7-27 |
| 8- 2 | Paving, Youngstown, Ohio | 7-27 |
| 8- 2 | Macadamizing, Xenia, Ohio. | 7-27 |
| 8- 2 | Paving, etc., Ottawa, Kan. | 7-27 |
| 8- 2 | Grading, etc., Marietta, Ohio | 7-27 |
| 8- 2* | Paving, etc., Albion, Mich. | 7-27 |
| 8- 3 | Grading, etc., McConnelsville, Ohio | 7-27 |
| 8- 3 | Walks, etc., New York, N. Y. | 7-27 |
| 8- 3 | Sidewalks, Pocatello, Idaho. | 7-27 |
| 8- 4 | Paving, etc., Canton, Ohio | 7-27 |
| 8- 4 | Gravel road, Concord, N. H. | 7-27 |
| 8- 4 | Grading, etc., Arcanum, Ohio | 7-27 |
| 8- 4 | Paving, etc., Cambridge, O. | 7-27 |
| 8- 4 | Highway, North Yakima, Wash. | 7-27 |
| 8- 5 | Roads, Marysville, Ohio. | 6-29 |
| 8- 5 | Paving, Bowerston, Ohio | 7- 6 |
| 8- 7 | Gravel roads, Liberty, Ind. | 7-13 |
| 8- 7 | Paving, Sayre, Pa. | 7-20 |
| 8- 4 | Roads, Winchester, Ind. | 7-20 |
| 8- 7 | Roads, Marion, Ind. | 7-20 |
| 8- 7 | Roads, Portland, Ind. | 7-20 |
| 8- 7 | Roads, Salem, Ind. | 7-20 |
| 8-7 | Roads, Fowler, Ind. | 7-20 |
| 8- 7 | Roads, Decatur, Ind. | 7-20 |
| 8- 7 | Roads, Brownstone, Ind. | 7-20 |
| 8- 7 | Roads, Newport, Ind. | 7-20 |
| 8- 7 | Road, Brookhaven, Miss. | 7-20 |
| 8- 7 | Grading, etc., Ashland, Ohio. | 7-20 |
| 8- 7 | Road, New Philadelphia, O. | 7-20 |
| 8- 7* | Sidewalks, Larchmont, N. Y. | 7-27 |
| 8- 7 | Paving, Barre, Vt. | 7-27 |
| 8- 7 | Resurfacing, Washington, Pa. | 7-27 |
| 8- 7 | Road improvement, Los Angeles, Cal. | 7-27 |
| 8- 7 | Roads, Versailles, Ind. | 7-27 |
| 8- 7 | Roads, Greenburg, Ind. | 7-27 |
| 8- 7 | Roads, Washington, Ind. | 7-27 |
| 8- 7 | Roads, Crown Point, Ind. | 7-27 |
| 8- 8 | Roads, Spencer, Ind. | 7-27 |
| 8- 8 | Roads, Martinsville, Ind. | 7-27 |
| 8- 8 | Roads, Marysville, Ohio | 7-20 |
| 8- 8 | Roads, Vincennes, Ind. | 7-20 |
| 8- 8 | Roads, Brazil, Ind. | 7-20 |
| 8- 8 | Roads, Bedford, Ind. | 7-20 |
| 8- 8 | Roads, Logansport, Ind. | 7-20 |
| 8- 8 | Roads, Wabash, Ind. | 7-20 |
| 8- 8 | Roads, Winamac, Ind. | 7-20 |
| 8- 8 | Gravel road, Vincennes, Ind. | 7-13 |
| 8- 9* | Road improvement, Bridgeton, N. J. | 7-13 |
| 8- 9 | Highway impvt., Jonesville, Va. | 7-20 |
| 8- 9 | Roads, Lafayette, Ind. | 7-20 |
| 8- 9 | Roads, Corydon, Ind. | 7-20 |
| 8- 9 | Roads, Logansport, Ind. | 7-20 |
| 8- 9 | Roads, Noblesville, Ind. | 7-20 |
| 8- 9 | Macadamizing, Grove City, Ohio | 7-27 |
| 8- 9 | Macadamizing, etc. Columbus, Ohio | 7-27 |
| 8-10 | Sidewalks, Hammond, La. | 7-27 |
| 8-10 | Grading, etc., Steubenville, Ohio | 7-20 |
| 8-10 | Highways, New Orleans, La. | 7-20 |
| 8-10 | Roads, Brookville, Ind. | 7-20 |
| 8-11 | Road improvements, Cincinnati, Ohio | 7-27 |
| 8-12 | Roads, Frankfort, Ind. | 7-27 |
| 8-13 | Paving, etc., Napa, Cal. | 7-27 |
| 8-15 | Grading, etc., London, Ohio. | 7-27 |
| 8-15* | Paving, Brownsville, Tex. | 7-20 |
| 8-13 | Street improvement, Cleveland, Ohio. | 7-13 |
| 9- 2 | Paving, Chile (Foreign) | 7-27 |

## Miscellaneous.

| Bids close. | | Noted in issue of |
|---|---|---|
| 7-28 | Dredging, San Francisco, Cal. | 7-13 |
| 7-28 | Lumber, Memphis, Tenn. | 7- 6 |
| 7-29 | Wireless stations, Tobernory, Ont. | 7-27 |
| 7-31 | Dredging, cofferdam, etc., Seattle, Wash. | 7-13 |
| 7-31* | Sewer ditch, Ada, Ohio | 7-13 |
| 8- 1 | Steam lighters, Brazil, (Foreign) | 6-29 |
| 8- 1* | Steel, etc., Detroit, Mich. | 6-29 |
| 8- 1* | Steamers, Argentine. (Foreign) | 6-15 |
| 8- 1 | Railway, Ontario (Rys.) | 6- 8 |
| 8- 1 | Railway, Ottawa, Ont. | 6-22 |
| 8- 1* | Drains, Elkhorn, Wis. | 7- 6 |
| 8- 1* | Dam, Waynesville, N. C. | 7-20 |
| 8- 1 | Earthwork, Memphis, Tenn. | 7-20 |
| 8- 1 | Ditch, Glencoe, Minn. | 7-20 |
| 8- 1 | Ditch, Paragould, Ark. | 7-20 |
| 8- 1 | Incinerator (Garbage, Virginia, Minn. | 7-27 |
| 8- 1 | Freight shed, Halifax, N. S. | 7-27 |
| 8- 1 | Drain, Rockwell City, Iowa | 7-27 |
| 8- 2 | Improving channels, Des Moines, Iowa | 7-20 |
| 8- 2* | Dredging, Norfolk, Va. | 7-13 |
| 8- 2* | Improving channels, Des Moines, Iowa | 7-27 |
| 8- 3* | Shore revetment, Jacksonville, Fla. | 7- 6 |
| 8- 3 | Shelter house, Columbus Ohio | 7-27 |
| 8- 4 | Terminal posts, New York. | 7-27 |
| 8- 4 | Ditches, Crowley, La. | 7-27 |
| 8- 4 | Tunnel, Atlanta, Ga. | 7-27 |
| 8- 4* | Stone dike, Galveston, Tex. | 7- 6 |
| 8- 4 | Canal work, Ottawa, Ont. | 7-20 |
| 8- 5* | Levee, East St. Louis, Ill. | 7- 6 |
| 8- 7 | Torpedo-boat destroyers, Washington, D. C. | 6- 8 |
| 8- 7* | Dredging, New York | 7-27 |
| 8- 7 | Creosoted piles, Panama (U. S. Poss.) | 7-27 |
| 8- 7* | Material for intake bridges, etc., Panama (U. S. Poss.) | 7-13 |
| 8- 8 | Telegraph cable, Australia (Foreign) | 6-29 |
| 8- 8* | Elevator, Washington, D. C. | 7-27 |
| 8- 9 | Rails and fish plates, Australia (Foreign) | 7-27 |
| 8-10 | Waterproofing, Atlanta, Ga. | 7-27 |
| 8-10 | Ditch, St. James, Minn. | 7-27 |
| 8-10 | Harbor work, St. John, N. B | 6-22 |
| 8-10* | Channel excavation, Chicago, Ill. | 7-13 |
| 8-10 | Drainage canals, Tallahassee, Fla. | 7-20 |
| 8-10* | Cold storage bldg., Danville, Pa. | 7-20 |
| 8-11 | Retaining wall, Cincinnati, Ohio | 7-27 |
| 8-12 | Dredge, Charleston, S. C. | 7-27 |
| 8-12 | Wharf trestle, Cuba (U. S. Poss.). | 7-13 |
| 8-14 | Electric plant, Australia (Foreign) | 6-29 |
| 8-14 | Electric tramway, Russia (Foreign) | 7-20 |
| 8-14 | Dredging, etc., Seattle, Wash. | 7-27 |
| 8-14 | Dams and ditches, Rapid City, S. Dak. | 7-27 |
| 8-15 | Drainage work, Clinton, Mo. | 7-27 |
| 8-15 | Tugboats, Vicksburg, Miss. | 7-20 |
| 8-16* | Vacuum cleaning system, New York | 7-20 |
| 8-17 | Broken stone, Indianapolis, Ind. | 7-27 |
| 8-18 | Drainage canal, Burlington, Wis. | 7-27 |
| 8-19 | Rock, Portland, Ore. | 7-27 |
| 8-19 | Feeder panels, Boston, Mass. | 7-27 |
| 8-19 | Monument, Vincennes, Ind. | 7-20 |
| 8-21* | Vacuum cleaning system, Los Angeles, Cal. | 7-13 |
| 8-21 | Earthwork, Memphis, Tenn. | 7-27 |
| 8-21 | Lift and crane, Brazil (Foreign) | 7-27 |
| 8-23 | Telegraph, etc., material, Australia (Foreign) | 7-20 |
| 8-24 | Ditch, St. Paul, Minn. | 7-27 |
| 8-24* | Filling, Montgomery, Ala. | 7-27 |
| 8-25 | Floating crane, Brazil (Foreign) | 7-27 |
| 8-28* | Breakwater, Detroit, Mich. | 7-27 |
| 8-31 | Drilling machines, Argentina (Foreign) | 7-20 |
| 9- 1 | Submarine boats, Wash, D. C. | 6-29 |
| 9- 1* | Dredging and filling, Minneapolis, Minn. | 7-27 |
| 9- 5* | Dam, Fort Worth, Tex. | 7-20 |
| 9- 5 | Telephone material, Australia (Foreign, | 7-27 |
| 9- 8* | Breakwater construction, Hawaii, (U. S. Poss.) | 7-13 |
| 9- 9 | Tramway, Spain (Foreign) | 7-27 |

## Examinations.

| Examination date. | | Noted in issue of |
|---|---|---|
| 8- 1 | Chemist, Wash., D. C. | 6- 29 |
| 8- 2 | Field Assistant, Trenton, N. J. | 7-20 |
| 8- 5 | Associate Statistician, Washton, D. C. | 7- 6 |
| 8- 9 | Aid, Washington, D. C. | 7-13 |
| 8- 9 | Assistant Engineer in Forest Products, Washington, D. C. | 7-13 |
| 8- 9 | Draftsman, Wash., D. C. | 7-20 |
| 8-11 | Asst. Engr. on Pitometer, etc, New York, N. Y. | 7- 6 |

## MISCELLANEOUS.

(Continued from page 44.)

**Waterproofing.** — Atlanta, Ga.—Bids will be received by the Commissioners of Roads and Revenues of Fulton County, Atlanta, until noon, Aug. 10, for furnishing all material and labor required for waterproofing in basement and sub-basement of floors, walls, etc., for a building covering 130 × 220 ft., consisting of sub-basement, basement and nine stories. Plans and specifications are on file at the office of the Commissioners and of A. Ten Eyck Brown and Morgan & Dillon, Associate Archs., Forsyth Bldg., Atlanta.

**Tunnel.** — Atlanta, Ga. — Bids addressed to the Chairman of the Street Committee will be received at the office of R. M. Clayton, Ch. of Construction until 3 p. m., Aug. 4, for alterations of reinforced concrete tunnel on A., B. & A. Railroad for widening of West Mitchell St. Plans and specifications can be obtained upon application to the Chief of Construction.

***Dredging.**—Jacksonville, Fla.—Bids were received as follows on July 17 by Capt. George R. Spalding, Corps Engrs., U. S. A., Jacksonville, for dredging in Hillsboro Bay, Fla., about 4,400,000 cu. yds.: Southern Dredging Co., Mobile, Ala., 500,000 cu. yds., at 13.3 cts., per cu. yd; total, $66,500. J. C. Titsell, Savannah, Ga., entire work, at 7.45 cts.; total, $327,800. Bowers Southern Dredging Co., Galveston, Tex., entire work, at 10½ cts. per cu. yd.; total, $462,000. P. Sanford Ross, Inc., Jersey City, N. J., 2,150,000 cu. yds., at 11¾ cts.; total, $252,625. Atlantic, Gulf & Pacific Co., New York, 2,150,000 cu. yds., at 10.6 cts.; total, $227,900; 1,750,000 cu. yds., at 10.99 cts., $192,325; entire work, at 10.7 cts.; $470,800. R. A. Perry, Galveston, Tex., 3,900,000 cu. yds., at 9.98 cts.; $389,200; 500,000 cu. yds., at 11.98 cts., $59,900.

**✚Deepening Channel.**—Orlando, Fla.—Bids were received on July 17 by the Board of County Commissioners, Orlando, for improving St. Johns River Ferry at Geneva Ave., crossing mouth of Lake Jessup, by deepening, widening and straightening a cut-off channel, to consist of making an excavation 100 × 750 ft. and an average of 7 ft. deep, approximating 20,000 cu. yds. The contract has been awarded to J. F. McLAIN & CO., of Geneva, Fla., at $14,000.

***Filling.** — Montgomery, Ala.—Bids will be received until 1 p. m., Aug. 24, by Lt. Col. G. D. Fitch, Corps Engrs., U. S. A., Montgomery, for filling at Fort Pickens, Fla.

**Ditches.**—Crowley, La.—Bids will be received until Aug. 4 by the Board of Commissioners, Sixth Ward, and Crowley Drainage District, Crowley, for the construction of 40 miles of open ditches two to six miles in length, 16 to 40 ft. wide, and 2 to 5 ft. deep, including about 600,000 cu. yds. This is a postponement from July 15. W. S. White is Engr. S. A. Williams is Secy. Bd.

**Earthwork.** — Memphis, Tenn.—Bids will be received until 11 a. m., Aug. 21, by the Mississippi River Commission, office of Maj. Clarke S. Smith, Corps Engrs., U. S. A., Memphis, for constructing about 466,000 cu. yds. of earthwork in Upper and Lower St. Francis and White Rivers Levee Districts.

**Retaining Wall.**—Cincinnati, Ohio.—Bids will be received by the Board of County Commissioners until noon, Aug. 11, for the following county work: Under Specifications No. 782, for retaining wall along Shawnee Creek, about 300 ft. west of Pennsylvania R. R., in Columbia Township. Plans and specifications are on file in the office of the Board of County Commissioners. Fred Dreihs, Clk., Cincinnati.

**Shelter House.**—Columbus, Ohio.—Bids will be received until Aug. 3 by H. S. Holton, Dir. Pub. Serv., for the erection of a shelter house in Goodale Park.

**Broken Stone.**—Indianapolis, Ind. — The Commissioners of Marion County, Indianapolis, are asking for bids until 10 a. m., Aug. 17 for broken stone for roads not less than 80 nor more than 110 carloads. Albert Sahm is County Audr.

**River Improvement.**—Terre Haute, Ind.—The Engineering Corps, U. S. A., Terre Haute, is surveying the lower Wabash River, with a view to letting a contract for the improvement of the river for navigation.

***Breakwater.**—Detroit, Mich. — Bids will be received until 3 p. m., Aug. 23, by Col. C. McD. Townsend, Corps Engrs., U. S. A., Jones Bldg., Detroit, for constructing a rubble mound breakwater at Biddle Point, Mackinac Island, Mich.

**✚Canal.**—Belleville, Ill.—The Richland Creek Drainage Commissioners on July 12 awarded the contract for the construction of a drainage canal to R. A. BROWN, of Washington, Ind., at $16,917. Other bids were: Dilly & Birdine, Hebron, Ind., $19,189; Walcott Dredging Co., Lafayette, Ind., $18,800; Lewis & Davis, Champaign, Ill., $19,-369; Vogt & McCann, Belleville, $19,-735. The estimated cost of the work was $19,490. The work calls for the excavation of 135,000 cu. yds. of earth.

**Drainage Canal.**—Burlington, Wis.—Bids will be received until Aug. 18, at the office of P. J. Hurtgen, Engr., Burlington, for constructing the Hoosier Creek drainage canal.

***Improving Channels.**—Des Moines, Iowa.—Bids will be received until 9 a. m., Aug. 2, by the City Council for work known as "the improvement of the channels of the Des Moines and Raccoon Rivers in Des Moines," consisting of excavation of new channels, construction of levees, mattresses, riprap and a concrete retaining wall, the cost of which is estimated at about $200,000. Specifications and proposal blanks may be obtained by addressing Horace Susong, City Clk.

**Drain.**—Rockwell City, Iowa.—Bids will be received until Aug. 1 by C. O. Dixon, County Audr., for furnishing material and constructing tile drain No. 143, Sections 33, 34 and 35, Lake Creek Township, and Sections 3, 4, 10 and 11, Calhoun Township. Estimated cost, $16,536.

**✚Ditch.**—Crookston, Minn.—Bids were received as follows on July 15 by H. T. Welte, County Audr., for constructing Ditch No. 86: Sisson & Hutchins, Litchfield, Minn., 14 cts.; SWANSON BROS., Moorehead, Minn., 12.85 cts. (awarded contract); Magean & Samson, Crookston, 16.25 cts. Number of cu. yds., 72,-365.

***Dredging and Filling.**—Minneapolis, Minn.—Bids for dredging in Cedar Lake and for filling low lands and boulevards adjacent will be received by the Board of Park Commissioners, City Hall, until noon, Sept. 1. A form of contract containing specifications, with map and plan attached, is on file in the office of the Board, and copies will be furnished on application. The estimated amount of material to be moved is 200,000 cu. yds. J. A. Ridgway is Secy.

**✚Ditch.** — Minneapolis, Minn.—Bids were received as follows on July 11 by A. P. Erickson, County Audr., for constructing Ditch No. 22: (a) Main ditch, (b) branch ditches: A. C. Davisson, (a) 15¾ cts.; (b) 18½ cts.; Fred Johnson, (a) 17 cts., (b) 17 cts.; McKILLIP & LYFORD, (a) 14 9-10 cts. (awarded contract), (b) 17 9-10 cts. (awarded contract).

**Ditch.**—St. James, Minn.—Bids will be received until Aug. 10 by J. C. Jensen, County Audr., Watonwan County, and Louis G. Vogel, County Audr., Brown County, at St. James, Watonwan County, for the construction of Judicial Ditch No. 6, in Watonwan and Brown Counties. Bids will be received for the job of digging and constructing the entire work either in one job or in one or more linear sections of 100 ft. each. The approximate amount of work is: 625 ft. of open ditch, and 14,176 ft. of tile drain; size of tile 6-in., 8-in., 12-in. and 14-in., and must be of first-class clay tile.

**Ditch.**—St. Paul, Minn.—The State Drainage Commission will receive bids until 2 p. m., Aug. 24, for the construction of a State ditch in Roseau and Kittson Counties. It will require 1,-800,000 cu. yds. of excavation. G. A. Ralph is Engr.

**Trout-house.**—The State Game and Fish Commission rejected all bids for the trout-house to be built at the fish hatchery received on July 22. P. J. Linhoff, Arch., St. Paul, is revising plans. Estimated cost, $10,000.

**Dams and Ditches.**—Rapid City, S. Dak.—Bids will be received until Aug. 14 by A. K. Thomas, City Audr., for constructing certain dams and ditches in Township No. 1, to intercept surface and storm water from flowing upon and flooding the streets.

***Dredging.** — Galveston, Tex.—Bids were received as follows on July 8 by Maj. G. P. Howell, Corps Engrs., U. S. A., Galveston, for dredging deep water harbor at Harbor Island, Aransas Pass, Tex., about 1,300,000 cu. yds. of material: Bowers Southern Dredging Co., Galveston, 11 cts. per cu. yd.; North American Dredging Co. of Texas, Galveston, 12.15 cts.; Southern Dredging Co., Mobile, Ala., 13 cts.

**✚Dredging.** — Galveston, Tex.—The contract for dredging at the mouth of the Brazos River, Tex., has been awarded by Maj. G. P. Howell, Corps Engrs., U. S. A., Galveston, to the BOWERS SOUTHERN DREDGING CO., of Galveston, at 15 cts. per cu. yd. Noted on June 8.

**Excavating Machine.**—Fallon, Nev.—Bids will be received until 2 p. m., Aug. 1, by the U. S. Reclamation Service, Fallon, for furnishing and delivering f. o. b, shipping point one revolving type drag-line scraper excavation machine, built and fully equipped for electric operation, with 3-phase, 60-cycle alternating current at 440 volts, the base frame and boom to be of steel construction. D. W. Cole is Project Engr., Fallon.

**Dredging, Etc.**—Seattle, Wash.—Bids will be received until noon, Aug. 14, by Maj. C. W. Kutz, Corps Engrs., U. S. A., Seattle, for dredging and the construction and repair of mattress sills in the Snohomish River, Wash.

**Rock.**—Portland, Ore.—Bids will be received until Aug. 19 by the U. S. Engineer, Portland, for delivering rock at Fort Stevens, Ore.

**✚Dredging.**—Los Angeles, Cal.—The STANDARD AMERICAN DREDGING CO., of San Francisco, Cal., has been awarded the contract by the U. S. Engineer at Los Angeles, for the additional dredging in the harbor channel at 42.5 cts. per cu. yd. The work consists of deepening the east half of the main channel to a depth of 30 ft.

**Freight Shed.**—Halifax, N. S.—Bids will be received by L. K. Jones, Secy., Dept. Rys. and Canals, Ottawa, Ont., until noon, Aug. 1, for the construction of a freight shed on the quay wall at Halifax. Plans, specifications and form of contract may be seen and full information obtained at the office of the Chief Engineer of the Department of Rys. and Canals, Ottawa, and at the office of the Chief Engineer of the Intercolonial Ry. at Moncton, N. B., or at the office of the Board of Trade, Halifax.

**Wireless Station.**—Tobermory, Ont.—Bids will be received until noon, July 29, by G. J. Desborats, Deputy Minister, Dept. Naval Service, Ottawa, Ont., for the erection of a wireless telegraph station at Tobermory. Plans, specification and form of contract can be seen at the office of the Superintendent of Wireless Telegraphs, Dept. Naval Service, Ottawa, the office of the Agent of the Department of Marine and Fisheries, Parry Sound, Ont., or the office of the Superintendent Engineer of Sault Ste. Marie Canal, Sault Ste. Marie, Ont., or the offices of the Postmaster at Owen Sound, Ont., or the Postmaster at Tobermory.

## U. S. POSSESSIONS AND CUBA.

**Steel Work.**—Honolulu.—Bids will be asked soon by the Navy Department, at Washington, D. C., for the steel work for the navy buildings to be erected at Pearl Harbor, T. H. The work will require 25,000 tons of structural steel.

**Pumps.**—Philippine Islands.—It is reported that all bids received on June 15, by Thomas Cruse, Ch. Q. M., U. S. A., 556 Federal Bldg., Chicago, Ill., for furnishing and delivering to the Construction Quartermaster, Fort Mills, Corregidor, P. I., six 1,000,000-gallon pumps, overhead crane and automatic devices have been rejected.

**Creosoted Piles.** — Panama. — Bids will be received until 2.30 p. m., Aug. 7, by Maj. F. C. Boggs, Corps Engrs, U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for creosoted piles. Blanks and general information relating to this circular No. 640 A may be obtained at Washington, or at the offices of the Assistant Purchasing Agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, La., and 1086 North Point St., San Francisco, Cal.; also from the U. S. engineer offices, in Chicago, Ill., and St. Louis, Mo.

## FOREIGN.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ——, ——. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

**Electric Tramway.**—Italy.—The City of Rome has been authorized to construct an electric tramway along various streets.

**Paving.**—Chile.—Bids will be received by the City of Santiago, until Sept. 2 for laying 70,000 sq. meters of asphalt paving.

**Watermain.**—Italy.—Bids will be received until Aug. 12 by the Sindaco, Palazzo Municipale, Brescia, for supplying the principal watermains of the new Villa Cogozzo aqueduct.

**Telephone Material.** — Australia. — Bids will be received at the office of the Deputy Postmaster General, Melbourne, until 3 p. m., Sept. 5, for the supplying 10,000 telephone protectors.

**Tramway.**—Spain.—Bids will be received until Sept. 9 at the Direccion General de Obras Publicas, Madrid, for the construction of a horse tramway from Villarreal to Grao de Burriana, in the province of Castellon.

**Lift and Crane.**—Brazil.—Bids will be received until Aug. 21 by the Inspectoria de Engenharia Naval, Ministerio de Morinba, for supplying and fixing an electric goods lift and an electric crane for the Naval Depot on Cobras Island.

**Bridge.**—Portugal.—Bids will be received until Sept. 17 at the offices of the Direccao Geral das Obras Publicas e Minas, Lisbon, for the construction of a bridge across the Sorraia Velho River, between Coruche and Monte da Barca.

**Rails and Fishplates.**—Australia. — Bids will be received by the Agent-General in London for the Victorian Railways Commissioners until 11 a. m., Aug. 9, for the supply of (a) about 1,-647 tons of 100-lb. steel rails and 151 tons of steel fishplates, and (b) about 19,718 tons of 80-lb. steel rails and 1,-760 tons of fishplates.

**Electrical Supplies.**—Brazil. — Bids will be received until Sept. 25 at the offices of the Directoria Geral do Expediente Ministrio da Viacao e Obras Publicas, Rio de Janeiro, for the supply of all the electric light fittings, fans, lamps, insulators, conductors, etc., in connection with the equipment of the new Postal-Telegraph Building in Porto Alegre with electric light.

**Floating Crane.**—Brazil.—Bids will will be received until Aug. 25, at the offices of the Inspectoria de Engenharia Naval, Ministerio da Marinha, Rio de Janeiro, for the supply of a floating crane capable of lifting 120 tons, and also for two auxiliary cranes having a lifting capacity of 50 and 25 tons respectively. The hull of the floating crane must be of the best Siemens-Martin steel.

For other Proposal Advertisements see pages 49, 50, 52, 53, 54, 56 of Advertisements and Construction News, page 36

## STREET RAILWAY.

Sealed proposals will be received at the Office of the Engineer of Hershey, Pa., Lebanon & Campbelltown Street Ry., at the Hershey Trust Company Building, Hershey Pa., up to 6 P. M., Thursday, August 17th, for the roadbed and track construction of approximately nine and one-fourth (9¼) miles of railway extending from Campbelltown to Twelfth Street, Lebanon, Pa. All materials except for masonry to be furnished by the Company. Plans, profiles and specifications for same can be examined at the Office of the Engineer. The Company reserves the right to reject any or all bids and to waive all defects.

H. N. HERR,
Engineer.

## SUBSTRUCTURE OF BRIDGE AT WASHINGTON STREET.

DEPARTMENT OF PUBLIC WORKS.

Chicago, July 22, 1911.

Sealed proposals will be received by the City of Chicago until 11 a. m., Saturday, Aug. 5, 1911, at room 406 City Hall, for furnishing, delivering and building in place all temporary work, and for furnishing all materials, tools, labor and all appliances and appurtenances required in the performance of all necessary operations for the complete construction and erection of the substructure for a bascule bridge over the South Branch of the Chicago River at Washington street, with all necessary abutments and approaches thereto, as well as for the removal of all obstructions found at the bridge site which might otherwise interfere with the construction of the new bridge; also for diverting the sewers on both sides of the river at Washington street, according to plans and specifications on file in the office of the Department of Public Works of said city, room 406 City Hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said department, indorsed "Proposals for Substructure of Bridge at Washington Street," and be accompanied with Three Thousand Dollars in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

The Commissioner of Public Works reserves the right to reject any or all bids.

Bidders must deposit five dollars with the Commissioner of Public Works to insure the return of the plans and specifications.

No proposal will be considered unless the party offering it shall furnish evidence satisfactory to the Commissioner of Public Works of his ability, and that he has the necessary facilities, together with sufficient pecuniary resources to fulfill the conditions of the contract and specifications, provided such contract should be awarded to him.

Companies or firms bidding will give the individual names, as well as the name of the firm, with their address.

L. E. McGANN,
Commissioner of Public Works.

PROPOSALS FOR INSTALLING PUMP IN PUMPING PLANT AT MADISON BARRACKS, NEW YORK.—Office of the Quartermaster, Madison Barracks, New York, July 17, 1911.—Sealed proposals, in triplicate, for the installation of a new pump in the pumping plant at this post, will be received at this office until 2 p. m., August 16, 1911, and then opened. Plans and specifications may be had upon application to this office. For securing these, intending bidders should forward certificate check for $10, check will be returned upon return of plans. The United States reserves the right to reject or accept any or all bids or any part thereof. Envelopes containing proposals should be indorsed "Proposals for installing Pump in Pumping Plant" and addressed to the QUARTERMASTER, Madison Barracks, New York.

WAR DEPARTMENT, U. S. Engineer Office, Montgomery, Ala., July 24, 1911. Sealed proposals for filling at Fort Pickens, Florida, will be received at this office until one o'clock, p. m., August 24, 1911, and then publicly opened. Information on application. G. D. FITCH, Lt. Col., Engrs.

**U. S. ENGINEER OFFICE,** Jones Building, Detroit, Mich., July 26, 1911. Sealed proposals for constructing a rubble mound breakwater at Biddle Point, Mackinac Island, Michigan, will be received at this office until 3 p. m., August 28, 1911, and then publicly opened. Information on application. C. McD. TOWNSEND, Col., Engineers.

---

## STRUCTURAL STEEL WORK.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the structural steel work, consisting of columns, girders, beams, bases, etc., for a building covering an area of approximately 130' × 220', consisting of sub-basement, basement and nine stories, all more minutely described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Structural Steel Work for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidder will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence in the drafting department of the manufacturer not later than September 1, 1911, and the entire work must be completed not later than March 15, 1912.

7. Payments on the work will be made upon the certificate of the Architect on the first day of each and every month during the time of this contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. East proposal shall be signed with full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER,
Chairman.
Commissioners of Roads and Revenues,
Fulton County, Georgia.
H. W. WOOD, Clerk.

---

## STAND-PIPES, CAST-IRON PIPE, WATER METERS, HYDRAULIC TURBINES AND POWER TRANSMISSION.

Ithaca, N. Y.

Sealed bids, addressed in care of the City Clerk will be received until Aug. 9, 1911, at 4 P. M., by the Board of Public Works of the City of Ithaca, N. Y., for the following:

(1) Steel stand pipes of 600,000 gallons and 150,000 gallons capacity, respectively. (2) A quantity of cast-iron water pipe approximating 2,000 ft. of 6 inch and 1,200 ft. of 8 inch pipe. (3) Two water meters for pipes of 24 inch and 20 inch diameter, respectively. (4) Two hydraulic turbines of 100 HP. each with governors. (5) Shafting, clutches, and chains, or other transmission apparatus for connecting said hydraulic turbines to three Goulds triplex pumps.

In all of the above except (2) the bid must include the cost of the guarantee of the apparatus in operation for one year. In (1) the apparatus must be installed by the bidder, and the bid shall include the cost of complete installation ready for operation. It is preferred that this should be done in the case of (3), (4) and (5), also.

Each bid must be accompanied by a certified check for 5% of the amount of the bid, which shall be forfeited to said Board in case the bidder fails to enter into a contract with said Board according to the terms of his bid.

Said Board reserves the right to reject any or all bids on any or all parts of the above.

DONALD F. McLEOD,
City Engineer.

Ithaca, July 22d, 1911.

---

## PILING.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF SOUTH PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the concrete piling in the various acceptable methods to receive the piling caps, columns, etc., for a building covering an area of approximately 130' × 220', consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a court house for Fulton County, Georgia, to be erected on the southeast corner of South Pryor and East Hunter Streets, in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids to be endorsed "Proposals for Concrete Piling for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidders will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are required must commence on the site not later than September 1, 1911, and be completed not later than November 15, 1911.

7. Payments on this work will be made upon the certificate of the Architect on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature for said certificate on or before the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with full name of the bidder, and if a company or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER,
Chairman.
Commissioners of Roads and Revenues,
Fulton County, Georgia.
H. W. WOOD, Clerk.

---

## WATER-PROOFING.

Required in the
COURTHOUSE FOR FULTON COUNTY,
To be erected on the
SOUTHEAST CORNER OF PRYOR AND EAST HUNTER STREETS,
In the City of Atlanta, Georgia,
for
Fulton County, Georgia.

1. Sealed proposals addressed to the Commissioners of Roads and Revenues of Fulton County, Georgia, will be received until twelve o'clock, noon, August 10, 1911, for the furnishing of all material and labor required for the waterproofing in the basement and sub-basement of floors, walls, etc., for building covering an area of approximately 130' × 220', consisting of sub-basement, basement and nine stories, all as more minutely described in the plans and specifications for a Court House for Fulton County, Georgia, to be erected on the Southeast corner of South Pryor and East Hunter Streets in the City of Atlanta, Georgia, for Fulton County, Georgia, on file and open for inspection at the office of the Commissioners of Roads and Revenues and at the offices of the Associate Architects, A. Ten Eyck Brown and Morgan & Dillon, 607-10 Forsyth Building, Atlanta, Ga. All bids must be endorsed "Proposals for Waterproofing for Fulton County Court House."

2. Copies of Drawings and Specifications may be obtained from the above Architects, at 607-10 Forsyth Building, Atlanta, Ga., upon a deposit of a certified check for $20.00 for each set. Said check to be returned to the maker upon the return of drawings and specifications in good condition.

3. All bids must be submitted on Special Proposal blanks furnished by above Architects, or they will not be considered. Each proposal must be accompanied by a certified check of two per cent. of the total amount of bid, payable to the Commissioners of Roads and Revenues of Fulton County, Ga., as a guarantee that the successful bidders will enter into a contract according to said plans and specifications and execute a bond for double the amount of contract within ten days after notification of the acceptance of his bid, failing which said certified check shall become forfeited to the Commissioners of Roads and Revenues as liquidated damages.

4. On signing of contract and approval of bond, the certified checks of the unsuccessful bidders will be returned to their respective makers, and further, if contract is not awarded or bond approved within two weeks from above date of opening proposals, the obligation of the bidders will cease and their checks will be returned.

5. Bidders will furnish sufficient evidence of their ability and experience in this class of work and must possess proper resources to carry on work satisfactory to the Architects and the Commissioners of Roads and Revenues.

6. This work for which above proposals are requested must commence on the site not later than March 15, 1912, and be completed not later than May 15, 1912.

7. Payments on the work will be made upon the certificate of the Architect on the first day of each and every month during the time of the contract of 85% of the value of the work furnished and erected, provided the Contractor has made application over his signature the 27th day of preceding month, and that a schedule of material and labor in place has been furnished with the estimate, a certificate will be given by the Architects for the balance, or 15%, upon completion of the contract in conformity with the plans and specifications, application having been made as above.

8. Each proposal shall be signed with full name of the bidder, and if a firm or corporation, by the full name of each partner or officer. All amounts shall be written in ink and expressed in words as well as in figures.

9. The Commissioners of Roads and Revenues of Fulton County, Georgia, reserve the right to reject any or all proposals.

10. By order of the Commissioners of Roads and Revenues of Fulton County, Georgia.

(Signed) H. E. W. PALMER,
Chairman.
Commissioners of Roads and Revenues,
Fulton County, Georgia.
H. W. WOOD, Clerk.

---

## BUILDING.

Perry, N. Y.

Notice is hereby given that sealed proposals will be received on or before Saturday, August 5, at 1 o'clock p. m., 1911, for the erection and completion of a Village Building. Plans and specifications can be seen at the office of O. N. Bolton, Village Clerk, or at the office of the architect, F. W. Kirkland, Rome, N. Y., and at the office of H. C. Kittredge, 815 German Insurance Building, Rochester, N. Y. Proposals will be required for building complete, including heating, plumbing, etc., but the contractor will submit a separate figure on the heating and plumbing and electrical work.

Each proposal shall be accompanied by a deposit of cash or a certified check, payable to C. A. Carmichael, president, with a sum equal to 3 per cent. of the amount of each proposal as an evidence of good faith, and to the effect that if the proposal of the bidder should be accepted the bidder will enter into a contract and furnish a satisfactory bond of a regular surety or guarantee company equal to 30 per cent. of the contract price. The deposit or certified check to be forfeited if the bidder whose proposal should be accepted, withdraws from the competition or shall fail to give satisfactory bond and execute a contract.

Bids to be enclosed in a sealed envelope and addressed to O. N. Bolton, Village Clerk, endorsed: "Bid for Village Building."

Proposal blanks will be furnished by the architect. The right is reserved to reject any or all bids.

By Order of Board of Trustees,
C. A. CARMICHAEL, President,
O. N. BOLTON, Clerk.
Dated Perry, N. Y., July 20, 1911

## CALUMET-SAG CHANNEL EXCAVATION.

THE SANITARY DISTRICT OF CHICAGO.

Sealed proposals endorsed—"Proposals for excavation and collateral work on Contract Section Four of the Calumet-Sag Channel," will be received by the Clerk of The Sanitary District of Chicago at the office of the said Sanitary District, on the 15th floor of the American Trust Building, Chicago, Illinois, until 12 m., Standard time, on August 10, 1911, and will be publicly opened by the Board of Trustees of said Sanitary District at a meeting to be held on that day or the first meeting thereafter.

The work for which tenders are invited consists of the excavation and collateral work on Contract Section Four of the Calumet-Sag Channel of the Sanitary District of Chicago, in the Township of Palos, County of Cook, State of Illinois.

The approximate quantities for the comparison of bids are:

(a) 780,000 cubic yards of Glacial drift.
(b) 121,000 cubic yards of rock excavation.
(c) 37,000 square yards of rip-rap slope.

Specifications and plans may be obtained upon application at the office of said Sanitary District.

All bids must be upon blank forms of proposals furnished by said Sanitary District and shall be made in accordance with and to conform to all the terms and conditions stated therein.

The Board of Trustees of said Sanitary District reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO.
By THOMAS A. SMITH,
President of its Board of Trustees.

Attest:
I. J. BRYAN, Clerk.
Chicago, July 3, 1911.

## GRADING AND PAVING.

Albion, Mich.

The City of Albion, Michigan, hereby gives notice that proposals will be received until 5 o'clock p. m., on the 2d day of August, 1911, at the office of the City Clerk for furnishing of all materials and doing the work of grading and paving Michigan Ave., from the east line of Superior Street to the east line of Mingo St., such paving to be with macadam.

Bidders will also state price of combined curb and gutter and separate bids will be received therefor.

The work to be done according to specifications, plans and diagrams on file in the office of the City Clerk and which contain an estimate of excavation and quantity of work to be done.

A guaranty of workmanship and durability for the term of five years will be required.

A certified check for $1,000 must accompany each bid for the entire work, and a certified check for $200 must accompany each bid for the construction of combined curb and gutter alone; the same to be forfeited if the bid be accepted and the bidder neglects or refuses to enter into contract with said City.

The City reserves the right to reject any and all bids.

Bidders will furnish satisfactory surety bonds for the performance of contract for labor and material and for said guaranty.

Dated July 21, 1911.

W. R. NOYES, City Clerk.

## SEWER CONSTRUCTION.

Office of the Commissioners of Sewerage of Louisville, Ky., Incorporated.

Sealed proposals for the construction of "Section D-Middle Fork Sewer," Contract No. 82, and of the "34th Street Sewer," Contract No. 83, will be received at the office of the Commissioners of Sewerage, No. 605 Equitable Building, Louisville, Ky., until 12 o'clock noon, August 4.

The work consists in the Middle Fork Sewer mainly of the construction of 3,580 feet, 30-in. plain concrete sewer, average depth of cut 8 feet, including 760 cubic yards of concrete.

The "34th Street Sewer" consists of about 800 feet of 45-in. concrete sewer and 250 feet of 15-in. pipe sewer, and will contain about 250 cubic yards of concrete.

Sealed bids should be endorsed "Proposal for Section D-Middle Fork Sewer" or "Proposal for 34th Street Sewer," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by certified check for at least Seven Per Cent. (7%) of the amount of the bid, or a "Bidder's Bond," as described in the form of proposal.

Plans and specifications may be seen at the office of the Commissioners of Sewerage.

P. L. ATHERTON,
Chairman.

CHAS. P. WEAVER, Secy. and Treas.
J. B. F. BREED, Chief Engr.

## BRIDGE.

Belvidere, N. J.

Sealed bids or proposals will be received on Wednesday, August 2, 1911, at 2 p. m., in the Court House at Belvidere, N. J., by a committee of the Board of Chosen Freeholders of the County of Warren, for the building of a reinforced Concrete Arch Bridge, 90 feet span over Pequest River, Belvidere, N. J.

Bids must be by the lump sum on all work above the foundation line and unit prices per cubic yard on all work below foundation line, and on piles as called for in the specifications.

Each bidder must accompany his bid with a certified check for the sum of $500 payable to the order of the Director of the Board of Chosen Freeholders of the County of Warren, as a guarantee that if the contract be awarded to him he will when required by the Board execute an agreement in writing to perform the work according to the plans and specifications.

Bids will be received at the time named and not before and not after.

The plans and specifications may be seen at office of Clerk of Board of Freeholders, at Belvidere, N. J.

The right to reject any or all bids is reserved.

(Signed) J. R. THATCHER,
Director, Board Chosen Freeholders.

## RAILROAD CONSTRUCTION.

Sistersville, W. Va.

Sealed proposals will be received by the Tyler Traction Company, Sistersville, W. Va., until 12 noon, Aug. 8, 1911, for the construction of 11 miles of railroad. The work consists principally of approximately 100,000 cu. yds, of excavation, 13,000 cu. yds, of borrow, 11,000 cu. yds, tunnel excavation, 2,000 cu. yds. of bridge and culvert masonry, and the laying of track. Specification and profile can be seen in the office of the Chief Engineer.

Each bid must be accompanied by a certified check for two thousand dollars ($2,000). The company will return each check upon their rejection of bid accompanying it, but will hold check of successful bidder until contract is signed and a fifteen thousand dollar ($15,000) bond is executed by him. The company reserves the right to reject any or all bids.

H. W. McCOY
President.

R. C. VENABLE,
Chief Engineer,
Sistersville, W. Va.

## PIPE AND CASTINGS.

Athol, Mass., July 19, 1911.

Sealed proposals will be received by the Board of Water Commissioners of the Town of Athol, Mass., until 2 o'clock p. m., August 1, 1911, for furnishing 320 tons of 12-in. cast-iron pipe and special castings.

Specifications may be had upon application to the Board.

H. L. HAPGOOD,
Chairman.

JAMES L. TIGHE, Engr., Holyoke, Mass.

TREASURY DEPARTMENT, Office of Supervising Architect, Washington, D. C., July 17, 1911.—Sealed proposals will be received in this office until 3 o'clock p. m., on the 30th day of August, 1911, and then opened for the construction, complete, (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures) of the United States Post Office at Eufaula, Alabama, in accordance with drawings and specification, copies of which may be obtained from the Custodian of site at Eufaula, Ala., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

## EXCAVATION AND LEVEES.

Des Moines, Iowa.

Sealed proposals will be received by the City Council of Des Moines, Iowa, for work known as "the improvement of the channels of the Des Moines and Raccoon Rivers in Des Moines," consisting of excavation of new channels, construction of levees, mattresses, rip rap and a concrete retaining wall, the cost of which is estimated at about $200,000.

Bids must be in the hands of the City Clerk before 9 A. M., August 2, 1911. Specifications and proposal blanks may be obtained by addressing

HORACE SUSONG,
City Clerk.

## SEWER AND WATER MAINS.

Matteawan, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Matteawan, N. Y., on or before August 22, 1911, for furnishing and laying about 22,000 feet of 4, 6 and 8-inch cast-iron water pipe and fittings, also for 5,700 feet of 24-inch vitrified sewer pipe.

Proposals for same to be submitted separately and addressed to the Village Clerk.

Bids to be opened at a meeting of the Trustees at 8 P. M., August 22, 1911.

Specifications, proposals and further information can be obtained at the office of the Village Engineer, Matteawan, N. Y.

Each bid must be accompanied by a cash deposit or a certified check for ten per cent. of the amount of the bid.

The Board of Trustees reserves the right to reject any or all bids.

HENRY P. JOHNSTON, Pres.
B. I. D. ROOSA, Clerk.

## SIDEWALKS.

Village of Larchmont, N. Y.

Notice is hereby given that the Board of Trustees of the Village of Larchmont, Westchester Co., N. Y. will on Monday, August 7, 1911, at 8.30 p. m., at the Village Hall, Larchmont, N. Y., receive sealed proposals for constructing concrete sidewalks in said village.

Specifications for constructing same may be obtained from L. E. VanEtten, Engineer, 12 & 14 Lawton St., New Rochelle, N. Y.

The Board of Trustees reserves the right to reject any and all bids.

Dated Larchmont, July 17, 1911.

By order of the
BOARD OF TRUSTEES,
Village of Larchmont,
EUGENE D. WAKEMAN,
Village Clerk.

## BRIDGE.

Bermuda, La.

Sealed proposals for the construction of a steel Highway Bridge over Cane River at Bermuda, La., will be received by the Bridge Committee up to 12 o'clock noon, of Thursday, August 31, 1911.

Bids will be addressed to P. E. Prudhomme, Chairman, Natchitoches, La., and shall be accompanied by certified check in the sum of Six Hundred Dollars.

The right to reject any and all bids is reserved.

For copies of plans and specifications address Ira W. Sylvester, C. E., Alexandria, La.

P. E. PRUDHOMME,
Chairman.

DEPARTMENT OF THE INTERIOR, July 20. Sealed proposals, in duplicate, will be received at this Department until 2 o'clock p. m., Tuesday, August 8, 1911, for the installation of one electric elevator and the construction of the necessary shaft and penthouse therefor, at the Freedmen's Hospital buildings, Washington, D. C., in accordance with the specifications and drawings, copies of which may be obtained upon application to the Chief Clerk of this Department. The right is reserved to reject any and all bids, to waive technical defects and to accept any part of any bid and reject the other part, if the interests of the Government shall require it. Proposals must be plainly marked and addressed to the Secretary of the Interior, Washington, D. C. CARMI A. THOMPSON, Assistant Secretary.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y., July 27, 1911.—Sealed proposals for dredging in Wappinger Creek, N. Y., and in harbors at Tarrytown and Peekskill, N. Y., will be received at this office until 12 m., August 7, 1911, and then publicly opened. Information on application. W. M. BLACK, Col., Engrs.

## ADMINISTRATION BUILDING.

Malone, N. Y.

Sealed proposals for construction, including heating, plumbing and electric work for Administration Building, including alterations in existing rear extension and for two Dormitory Buildings for Boys and Girls at Northern New York Institution for Deaf Mutes, Malone, N. Y., will be received by John P. Badger, President, Board of Trustees, Northern New York Institution for Deaf Mutes, Malone, N. Y., until four o'clock P. M., Wednesday, August [illegible]th, 1911, when they will be opened and read publicly.

Proposals shall be accompanied by a certified check in the sum of [illegible],000, and the contractor to whom the award is made will be required to furnish Surety Company bond in the sum of [illegible]% of the amount of contract within 30 days after notice of award of contract and in accordance with the terms of specification No. 1455. The right is reserved to reject any or all bids.

Drawings and specifications may be consulted and blank forms of proposal obtained at the Northern New York Institution for Deaf Mutes, Malone, N. Y., and at the office of the State Architect. Complete sets of plans and specifications will be furnished to prospective bidders upon reasonable notice to and in the discretion of the State Architect, Franklin B. Ware, Albany, N. Y.

## LAYING WATER-PIPE.

City of Pittsfield, Mass.

Sealed bids or proposals for laying water pipe in the Town of Lenox and the Town of Washington, Mass., addressed to the Clerk of the Board of Public Works and endorsed "Proposal for Laying Water Pipe; Section 3," will be received at the office of the Board of Public Works, City Hall, Pittsfield, Massachusetts, until two o'clock P. M., Monday, the seventh day of August, 1911. At the above place and time the bids will be publicly opened and read.

Pamphlets containing information for bidders, form of proposal, contract and specifications will be ready about August 1, 1911, and will be mailed to contractors who apply to the Engineer of the Board of Public Works, or may be obtained at his office or at the office of Hiram A. Miller, Consulting Engineer, 8 Beacon Street, Boston, Mass. The plans may be seen at either office.

The principal item of work is laying about 3,800 feet of eighteen-inch cast-iron pipe. The printed form must be used in making bids. The right is reserved to reject any or all bids or to accept any bid.

WM. H. SWIFT, Chairman; ARTHUR H. RICE, EDWARD A. JONES, DANIEL ENGLAND, Committee on Water Supply; A. B. FARNHAM, Engineer, Board of Public Works.

For Additional
**PROPOSAL**
Advertisements
See pages 46 and 47

## Situations Wanted

### Civil Engineers

A YOUNG man, civil engineering graduate, capable and very energetic, one year's experience in surveying line, desires a position. Salary moderate. Locality not important. Address "K. B. 4," Engineering News, New York. 4-1t

### Draftsmen

A YOUNG man, civil engineering graduate, very energetic, one year's experience in tracing and detailing, desires a position. Address "H. B. 4," Engineering News, New York. 4-1t

## Situations Open
(Or Vacant)

DETAILERS and checkers on structural work. GEO. A. JUST CO., 2[illegible] Vernon Ave., Long Island City, N. Y. 4-1t

WANTED—Several experienced structural column and beam detailers for building work. Address "L. B. 4," Engineering News, New York. 4-1t